

**Dr. SURESH KUMAR ROHILLA**  
PROGRAMME DIRECTOR  
WATER MANAGEMENT

**CSE**



**CENTRE FOR SCIENCE AND ENVIRONMENT**

**41, Tughlakabad Institutional Area, New Delhi-110 062 INDIA**

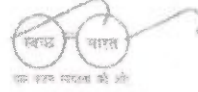
**Tel: 91-11-40616000, 29955124, 29956110 Fax: 91-11-29955879**

**Email: srohilla@cseindia.org, srohil@hotmail.com**

**Website: www.cseindia.org Mobile: 91-9910317904**



सत्यमेव जयते



आ स्वच्छ भारत को जी

D.O No. MD-SBM/AA/62/2016

30<sup>th</sup> May, 2016

**Sub: Support to Towns for achieving ODF status and for effective Fecal Sludge Management (FSM) - Reg.**

Respected Sir,

As you are aware, one of the key objectives of Swachh Bharat Mission (Urban) is to help all 4041 cities/towns achieve 100% Open Defecation Free (ODF) status by 2<sup>nd</sup> October 2019.

2. As we move towards 100% coverage of toilets, we need to look ahead at managing the large volume of fecal sludge from the growing number of septic tanks and single pit latrines. Proper fecal sludge management (FSM) that maximizes safety and sustainability is essential and we need to develop a model that will cater to the country's future needs. Fecal sludge comprises partially stabilized excreta and slurry from improved single pit latrines, septic tanks, as well as latrines based on other improved and unimproved technologies. Unless managed appropriately, this fecal sludge poses a huge risk to public health and the environment.

3. At present about 64 million Indian households must be supported with safe FSM services. Safe disposal of fecal sludge means ensuring safety while handling/emptying the sludge from septic tanks/pits and the proper transport and disposal of the removed sludge. The demand and supply services for FSM need to be assessed, along with the associated safety issues. Local bodies, both rural and urban; state governments, and the central government have a stake in ensuring that the fecal sludge is disposed of properly, in a manner that does not cause any health or environmental hazards.

4. In this regard, MoUD has decided to extend extensive handholding support to 29 cities/towns so that they can become flagship towns for Fecal Sludge Management in India. For the same, two agencies, **Centre for Science & Environment (CSE, a leading non-profit working on environmental issues in India)** and the **National Institute for Urban Affairs (NIUA, a Government of India entity)**, working on urban transformation efforts) will provide active handholding to the below selected cities:

Sl. No	State	Towns/Cities	Assigned Agency
1	Andhra Pradesh	Proddatur, Dist. Kadapa	NIUA
2	Andhra Pradesh	Gudur, Dist. Nellore	NIUA
3	Andhra Pradesh	Srikakulam, Dist. Srikakulam	CSE
4	Uttarakhand	Rishikesh, Dist. Dehradun	CSE
5	Uttar Pradesh	Unnao, Dist. Unnao	NIUA
6	Uttar Pradesh	Ghazipur, Dist. Ghazipur	NIUA
7	Uttar Pradesh	Chunar, Dist. Mirzapur	CSE
8	Uttar Pradesh	Ramnagar, Dist. Varanasi	CSE
9	Uttar Pradesh	Ganga Ghat, Dist. Unnao	CSE
10	Uttar Pradesh	Bijnore, Dist. Bijnore	CSE
11	Uttar Pradesh	Agra, Dist. Agra	
12	Bihar	Bhagalpur, Dist. Bhagalpur	NIUA
13	Bihar	Hajipur, Dist. Vaishali	NIUA

Sl. No	State	Towns/Cities	Assigned Agency
14	Bihar	Muzaffarpur, Dist Muzaffarpur	CSE
15	Bihar	Katihar, Dist Katihar	CSE
16	Bihar	Buxar, Dist Buxar	CSE
17	Bihar	Bohd Gaya, Dist Gaya	CSE
18	West Bengal	Bansberia, Dist Hugli	CSE
19	West Bengal	Bongaon, Dist North 24 Parganas	CSE
20	West Bengal	Darjeeling, Dist Darjeeling	CSE
21	Tamil Nadu	Tiruchirapalli	CSE
22	Madhya Pradesh	Gwalior	CSE
23	Madhya Pradesh	Dewas	CSE
24	Mizoram	Aizawl	CSE
25	Rajasthan	Bikaner	CSE
26	Odisha	Cuttack	CSE
27	Karnataka	Tumkur	CSE
28	Delhi	Delhi	CSE
29	Maharashtra	Solapur	CSE

The key contact person for the respective agencies are:

- a) **Centre for Science and Environment (CSE)**  
Shri Suresh Rohilla  
Programme Director, Water Management  
Email: srohilla@cseindia.org  
Mobile: 9910317904
- b) **National Institute of Urban Affairs (NIUA)**  
Ms Paramita Datta Dey  
Senior Research Officer  
Phone: +91-11-24617517, 24643284 (ext: 207)  
Email: pdey@niua.org

5. The scope of work of CSE and NIUA would be to help the towns/cities in capacity building for FSM apart from support to identify the technology and need for FSM in their area, support in selection of consultant for preparation of DPR, and Transaction Advisory Support for selection of private partner to operate the FSM facility. They may also support the city in other FSM related aspects such as behaviour change, regulatory changes etc.

6. I request you to kindly issue instructions to the concerned officers/ municipal commissioners to get in touch with CSE/NIUA at the earliest, and to work closely with them in order to fully leverage their significant expertise in this area. They may reach out to me in case any clarifications are required.

In anticipation of your kind support.

With regards,

Yours sincerely,

(Praveen Prakash)

To,

Chief Secretaries of concerned states

- 1) Shri Satya Prakash Tucker, IAS  
Chief Secretary – Andhra Pradesh  
sptucker@ap.gov.in
- 2) Shri Shatrughna Singh, IAS  
Chief Secretary – Uttarakhand  
cs-uttaranchal@nic.in
- 3) Shri Alok Ranjan, IAS  
Chief Secretary – Uttar Pradesh  
csup@nic.in
- 4) Shri Anjani Kumar Singh, IAS  
Chief Secretary – Bihar  
cs-bihar@nic.in
- 5) Shri Basudeb Banerjee, IAS  
Chief Secretary – West Bengal  
chiefsec@wb.gov.in
- 6) Shri K Gnanandesikan, IAS  
Chief Secretary – Tamil Nadu  
cs@tn.gov.in
- 7) Shri Anthony J.C. deSa, IAS  
Chief Secretary – Madhya Pradesh  
cs-madhyapradesh@nic.in
- 8) Shri Lalmalsawma, IAS  
Chief Secretary – Mizoram  
cs-mizoram@nic.in
- 9) Shri Swadheen S Kshatriya, IAS  
Chief Secretary – Maharashtra  
cs@maharashtra.gov.in
- 10) Shri Aditya Prasad Padhi, IAS  
Chief Secretary – Odisha  
cs-ori@nic.in
- 11) Shri C. S. Rajan, IAS  
Chief Secretary – Rajasthan  
cs-rajasthan@nic.in
- 12) Shri Arvind Jadhav, IAS  
Chief Secretary – Karnataka  
cs@karnataka.gov.in
- 13) Shri Kewal Kumar Sharma, IAS  
Chief Secretary – Delhi  
csdelhi@nic.in

Copy to:

- 1) Mission Directors (SBM) – Andhra Pradesh, Uttarakhand, Uttar Pradesh, Bihar, West Bengal
- 2) Shri Suresh Rohilla, Centre for Science and Environment
- 3) Ms Paramita Dey, National Institute of Urban Affairs
- 4) DS (SBM) – MSS
- 5) DA-CPHEEO



Manindra Nath Pradhan &lt;wbsudadir@gmail.com&gt; TA

## Request for appointment with Mr. M.N. Pradhan, IAS- Director, SBM- West Bengal

Swachhganga Cseindia &lt;swachhganga@cseindia.org&gt;

Fri, Jul 1, 2016 at 12:06 PM

To: Manindra Nath Pradhan &lt;wbsudadir@gmail.com&gt;

Cc: Suresh Kumar Rohilla &lt;srohilla@cseindia.org&gt;, Mahreen Matto &lt;mahreen@cseindia.org&gt;, "Dr. Ramesh PK Nair" &lt;ramesh@cseindia.org&gt;, Rajratna Sardar &lt;rajratna@cseindia.org&gt;, Shachi Pandey &lt;shachi@cseindia.org&gt;

Dear Mr. M.N. Pradhan,

Kindly refer to attachment and email below with regards to "Sensitisation Workshop cum Regional Conclave – Regarding Handholding Support for Preparation of City Sanitation Plans and Effective Septage and Faecal Sludge Management" on dated: 18-19 July, 2016 at Delhi".

**This is to request you for an appointment for a meeting with Dr Mahreen Matto (Deputy Programme Manager, Centre for Science and Environment) and Ms. Ridhima Gupta (Senior Research Associate, CSE) on 4th or 5th July, 2016 as per your convenience.**

The agenda of the meeting would be to discuss the background and way forward on the "Sensitisation Workshop cum Regional Conclave" scheduled in July.

Please find below and attached official letter for your reference.

Looking forward to your kind confirmation.

Regards,  
Swachhganga Team

----- Forwarded message -----

From: **Swachhganga Cseindia** <swachhganga@cseindia.org>

Date: Thu, Jun 16, 2016 at 2:30 PM

Subject: Sensitisation Workshop cum Regional Conclave – Regarding Handholding Support for Preparation of City Sanitation Plans and Effective Septage and Faecal Sludge Management' on dated: 18-19 July, 2016 at Delhi

To: cs-westbengal@nic.in

Cc: psecyud@wb.nic.in, wbsudadir@gmail.com, diramrutwb@gmail.com, programdirector.spmg@gmail.com, chairmanbm@gmail.com, bansb\_04@yahoo.com, Suresh Kumar Rohilla <srohilla@cseindia.org>, "Dr. Ramesh PK Nair" <ramesh@cseindia.org>, Rajratna Sardar <rajratna@cseindia.org>, Mahreen Matto <mahreen@cseindia.org>, Bhitush Luthra <bhitush@cseindia.org>, Shachi Pandey <shachi@cseindia.org>, Shantanu Kumar Padhi <shantanu@cseindia.org>, Ridhima Gupta <ridhima@cseindia.org>

To

**Mr Basudeb Banerjee, IAS**

Chief Secretary

Government of West Bengal

"NABANNA" HRBC Building, 325, Sarat Chatterjee Road

Howrah – 711 102

West Bengal

**Subject: Sensitization Workshop cum Regional Conclave – Regarding Handholding Support for Preparation of City Sanitation Plans and Effective Septage and Faecal Sludge Management' on dated: 18-19 July, 2016 at Delhi.**

Dear Sir/Madam,

This is in continuation to D.O ref letter no. MD-SBM/AA/62/2016 from JS & MD SBM MoUD dt. 30<sup>th</sup> May 2016, 7<sup>th</sup> June 2016 and D.O letter no. Sectt.01/2014-15/519/NMCG JS & MD NMCG dated: 10/06/2016 on above subject.

Centre for Science and Environment (CSE), New Delhi in partnership and support of Swacch Bharat Mission (SBM), Ministry of Urban Development and National Mission Clean Ganga (NMCG), Ministry of Water Resources for River Development and Ganga Rejuvenation, Government of India are organising a two day workshop cum regional conclave of state mission Directors of SBM /AMRUT, SPMG – NMCG, Mayors and Commissioners of the target flagship cities/towns.

The capacity building initiative is aimed at capacitating urban local bodies and other stakeholders and to help achieve convergence of NMCG – Namami Gange AMRUT, SBM – ODF cities programme in identified flagship town /cities by planning for city wide sanitation including non-sewered areas and identification of interventions for effective wastewater /septage management.

The workshop will be held at 18-19 July at Magnolia Hall, India Habitat Centre, Lodhi Road, New Delhi. Your are requested to nominate the State Mission Director – AMRUT, SBM, SPMG – NMCG as well as Mayor and Commissioner from target town/cities identified by ministry in your state – **refer attached list of town/cities.**

The workshop organisers will reimburse economy class airfare / 2 A.C train fare on production of valid receipts (tickets and boarding cards), local travel and arrange accommodation for all the invited participants. Each town is expected to be represented by at least 1-2 senior functionaries on both the days and actively participate in the workshop.

May I request you to nominate the senior functionaries of state and target towns /cities. Please send confirmation of nomination and participation **latest by 5<sup>th</sup> July, 2016** addressed to workshop coordinator- Mr Ramesh Nair, Programme Manager – Water Management (email: ramesh@cseindia.org, Fax. 011 29955879, tel. 40616000 mobile: 88008 70288), CSE – 41 Tuglakabad Institutional Area, New Delhi 110062 with a copy to undersigned and intimation to

Mission Director, SBM – MoUD as well as NMCG – MoWRD&GR.

If you require any clarification please do not hesitate to contact undersigned.

Yours Sincerely,

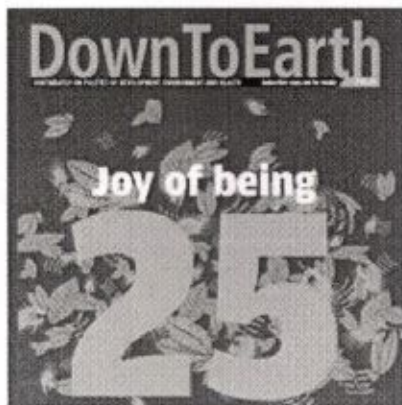
**Suresh Kumar Rohilla**


Programme Director- Water Management

Centre for Science and Environment, New Delhi

**Copy to:**

- **Dr Rajat Bhargava, IAS**, Joint Secretary & Mission Director, National Mission on Clean Ganga, Ministry of Water Resources, River Development & Ganga Rejuvenation, New Delhi
- **Mr Praveen Prakash, IAS**, Joint Secretary & Mission Director SBM, Ministry of Urban Development, New Delhi
- **Mr Debashis Sen, IAS**, Principal Secretary, Urban Development Department, West Bengal
- **Mr M.N. Pradhan, IAS**, Director- Swachh Bharat Mission (U), Director State Urban Development Agency (SUDA), Directorate of Local Bodies, West Bengal
- **Mr Mitra Chatterjee, IAS**, Mission Director- AMRUT, Department of Municipal Affairs, West Bengal
- **Mr Sutanu Prasad Kar, IAS**, Programme Director, SPMG (West Bengal) State NGRBA Programme, Management Group (SPMG), Urban Development Department, West Bengal
- **Mr Sankar Addhya**, Chairperson, Bongaon Municipality, West Bengal
- **Mr Arijita Sil (Sarkar)**, Chairperson, Bansberia Municipality, West Bengal
- **Mr Amar Singh Rai**, Chairman, Darjeeling Municipality, West Bengal



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# CENTRE FOR SCIENCE AND ENVIRONMENT

MAIN OFFICE: 41, Tughlakabad Institutional Area, New Delhi-110 062 INDIA  
Tel: 2995 5124, 2995 6110, 2995 6394, 2995 6399 Fax: 91-11-2995 5879 Email: cse@cseindia.org Website: www.cseindia.org  
BRANCH OFFICE: Core 6A, Fourth Floor, India Habitat Centre, Lodhi Road, New Delhi-110 003  
Tel: 2464 5334, 2464 5335



Ref.No: CSE\_GangaBasinProject\_2016\_11

Dated: June 15, 2016

Suresh Kumar Rohilla  
Programme Director - Water Management  
Email: srohilla@cseindia.org

## Email/ Fax

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LEAVES  
OF  
IMPORTANT  
SURVIVAL  
TREES  
IN  
INDIA —  
MAHUA,  
KHEJRI,  
ALDER,  
PALMYRA  
AND  
OAK

Founder Director  
ANIL AGARWAL

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Yours sincerely,

(Suresh Kumar Rohilla)

To

**Mr Basudeb Banerjee, IAS**  
Chief Secretary  
Government of West Bengal  
"NABANNA" HRBC Building, 325, Sarat Chatterjee Road  
Howrah – 711 102  
West Bengal

Copy to –

Principal Secretary UD/MA  
Mission Director (SBM) of target states  
Mission Director (AMRUT) of target states  
Head, SPMG – NMCG of target states  
Mayors & Commissioners of target town/cities  
Mission Director SBM – MoUD  
Mission Director NMCG – MoWR, RD&GR

Copy to:

**Dr Rajat Bhargava, IAS**

Joint Secretary & Mission Director  
National Mission on Clean Ganga  
Ministry of Water Resources, River Development & Ganga Rejuvenation  
Rear Wing, MDSS, 9-C.G.O. Complex  
Lodhi Road, New Delhi- 110 003

**Mr Praveen Prakash, IAS**

Joint Secretary & Mission Director SBM  
Ministry of Urban Development  
140-C, Nirman Bhawan  
New Delhi- 110 011

**Mr Debashis Sen, IAS**

Principal Secretary  
Urban Development Department  
Nagarayan, DF-8, Sector – 1  
Kolkata- 700 064  
West Bengal

**Mr M.N. Pradhan, IAS**

Director- Swachh Bharat Mission (U)  
Director State Urban Development Agency (SUDA)  
Directorate of Local Bodies ,Purta Bhavan, Salt Lake  
Kolkata – 700 091  
West Bengal

**Mr Mitra Chatterjee, IAS**

Mission Director- AMRUT  
Department of Municipal Affairs, Writers' Buildings  
Kolkata 700 001  
West Bengal

**Mr Sutanu Prasad Kar, IAS**

Programme Director  
SPMG (West Bengal) State NGRBA Programme  
Management Group (SPMG)  
Urban Development Department  
Government of West Bengal  
'NAGARAYAN', 6th Floor, DF-8  
Sector- i, Salt Lake City  
Kolkata- 700 064  
West Bengal

**Mr Sankar Addhya**

Chairperson  
Bongaon Municipality  
School Road  
Bongaon, 24 Pargan North - 743 235  
West Bengal

**Mr Arijita Sil (Sarkar)**  
Chairperson  
Bansberia Municipality  
Rudra Main Road , PO - Bansberia  
Hooghly - 712 502.  
West Bengal

**Mr Amar Singh Rai**  
Chairman  
Darjeeling Municipality  
Laden-la Road  
Darjeeling - 734101  
West Bengal

**List of Ganga basin towns/cities from the Uttarakhand, Uttar Pradesh, Bihar and West Bengal states-**

Sr.No.	City	District	State
1	Rishikesh	Dehradun	Uttarakhand
2	Chunar	Mirzapur	Uttar Pradesh
3	Ramnagar	Varanasi	Uttar Pradesh
4	Ganga ghat	Unnao	Uttar Pradesh
5	Bijnor	Bijnor	Uttar Pradesh
6	Muzaffarpur	Muzaffarpur	Bihar
7	Katihar	Katihar	Bihar
8	Buxar	Buxar	Bihar
9	Bodh Gaya	Gaya	Bihar
10	Bansberia	Hugli	West Bengal
11	Bongaon	North 24 Pargana	West Bengal
12	Darjiling	Darjiling	West Bengal

**List of other towns/cities**

Sr.No.	City	District	State
1	Agra	Agra	Uttar Pradesh
2	Aizawl	Aizawl	Mizoram
3	Bikaner	Bikaner	Rajasthan
4	Cuttack	Cuttack	Odisha
5	Delhi	Delhi	Delhi
6	Dewas	Dewas	Madhya Pradesh
7	Gwalior	Gwalior	Madhya Pradesh
8	Solapur	Solapur	Maharashtra
9	Srikakulam	Srikakulam	Andhra Pradesh
10	Tiruchirappalli	Tiruchirappalli	Tamil Nadu
11	Tumkur	Tumkur	Karnataka



## CAPACITY BUILDING OF URBAN LOCAL BODIES ON **WATER AND WASTE IN GANGA BASIN CITIES**

**PROJECT TITLE:** "Capacitating urban local bodies and other stakeholders in the Ganga basin on small scale, on-site wastewater and septage management systems".

**DURATION OF PROJECT:** Designed as a two-year kick-start phase for an overall 5-year process.

### **PROJECT HIGHLIGHTS**

- Develop and refine the necessary tools as well as quality checks and contextual research.
- Initiate city level engagement with Urban Local Bodies and city stakeholders to both, plan for city-wide sanitation including non-sewered areas, and identification of demonstration projects for effective wastewater treatment and FSM.
- Designed to find sustainable and affordable wastewater and septage management solutions and to put together evidence-based results for rapid uptake and mainstreaming, with an emphasis on cities in a river basin.
- Improve the sanitation situation of poor urban dwellers as well as improve the public health and environmental status of the city.
- For this, CSE will work in close coordination with the Bill & Melinda Gates Foundation capacity building hub at National Institute of Urban Affairs (NIUA), Swachh Bharat Mission and National Mission for Clean Ganga for wider outreach in the Ganga basin.



Phase I (October 2015- September 2017) will help seed a nodal centre for research, innovation and practice on sustainable, decentralized and affordable wastewater management, city wide sanitation and faecal sludge/septage management in India at the upcoming School of Water and Waste at the Anil Agarwal Environment Training Institute at Nimli, Alwar (Rajasthan) – a capacity building and education initiative of the Centre for Science for Environment, New Delhi.

#### PROJECT OVERVIEW

Centre for Science and Environment's (CSE) initiative will capacitate key state and non-state actors; provide laboratory-based technical and documentation support to pilot/model projects that offer on-site & off-site demonstration of various technologies, and develop technology options, testing protocols, monitoring and data validation procedures for wastewater treatment and septage/faecal sludge management.

The proposed measures ride on the policy intervention and implementation opportunities provided by the government's push for pollution abatement in the cities of the Ganga River basin as part of the rejuvenated national efforts to clean this major river in the sub-continent, clean town/cities under the Swachh Bharat Mission (SBM) and the Atal Mission on Rejuvenation and Urban Transformation (AMRUT).

#### THE APPROACH

**Key work packages in Phase 1 include the following:**

- Capacitating public functionaries and institutions; training and handholding support to Urban Local Bodies (ULBs) and other key stakeholders from 10 small / medium-sized cities in the Ganga basin in preparing City Sanitation Plan (CSP) with decentralized wastewater treatment and septage management.

#### HANDHOLDING PROCESS FOR PREPARATION OF CITY SANITATION PLAN



- Research-based solutions on technology options, and demonstration projects; research and documentation on decentralized wastewater and septage management technologies, method validation and testing protocols, and supporting the implementation of demonstration projects as learning tools.

- Establishing an independent laboratory; existing lab facilities will be upgraded to establish a resource and referral, environmental monitoring laboratory with the capability to test for a range of biological and chemical contaminants in water and waste. The lab will regularly monitor key pollution parameters from targeted sites in the Ganga basin. It will help build capacities of a wide range of stakeholders – ULBs, Jal Nigam, PHED engineers, select regulatory agencies and city development authorities, among others. Three key elements of the project in the phase I are as follows:

Phase I will lay the foundation for the intervention, in that it will develop and refine the necessary tools as well as quality checks and contextual research, and initiate city level engagement with ULBs and city stakeholders to both, plan for city-wide sanitation including non-sewered areas, and identification of demonstration projects for effective wastewater treatment and FSM. In

#### PHASE I (2015-17)

#### Key Elements of the Project



#### Capacity Building

Measure to provide training and handholding support to local ULBs and stake holder. Cover 10 small / medium-sized cities in the Ganga basin in preparing City Sanitation Plan (CSP) with decentralised wastewater treatment, septage management.



#### Research based solutions

Research and documentation on technology merits. Disseminating method validation and testing protocols for waste/ faecal sludge management supporting the implementing of demonstration projects.



#### Laboratory

Establish a state-of-art, referral monitoring laboratory with capability of developing testing protocols, input-output analysis and method validation to testing wastewater and faecal sludge.



addition, the Environmental Monitoring Lab will conduct targeted trainings for ULBs, Jal Nigam, water & waste utilities, PHED, relevant regulatory agencies and city development authorities, and also help capacitate technical staff of other labs, working in the sector in interpreting results for wastewater and faecal sludge. This will help seed a nodal centre for research, innovation and practice on sustainable, decentralized and affordable wastewater management, city wide sanitation and faecal sludge/septage management in India.

**The project will focus on**

- Working with the State Programme Management Units under Swacch Bharat Mission, Atal Mission for Rejuvenation and Urban Transformation as well as State Level Programme Management Groups (SPMG), created under National Mission for Clean Ganga help the convergence of state sanitation strategy and city sanitation planning.
- Also, it includes capacitating of secondary cities (small and medium) and towns between 50,000-100,000 population in river Ganga basin that mainly depend on on-site sanitation, which will otherwise remain outside the AMRUT mission.
- The programme will explore how to use tools developed by others, including BMGF partners, to help capacitate ULB officials and strengthen the process of CSP preparation.
- In addition, the first of its kind faecal waste referral laboratory to be set up at the School of Water and Waste at CSE Environment Training Institute, Nimli (Alwar, Rajasthan) will conduct targeted trainings for the urban local bodies, Jal Nigam, water and waste utilities, PHED, relevant regulatory agencies and city development authorities, and also help capacitate technical staff of other labs, working in the sector in interpreting results for wastewater and faecal sludge.

**THE INITIATIVE IS SUPPORTED BY: BILL AND MELINDA GATES FOUNDATION**

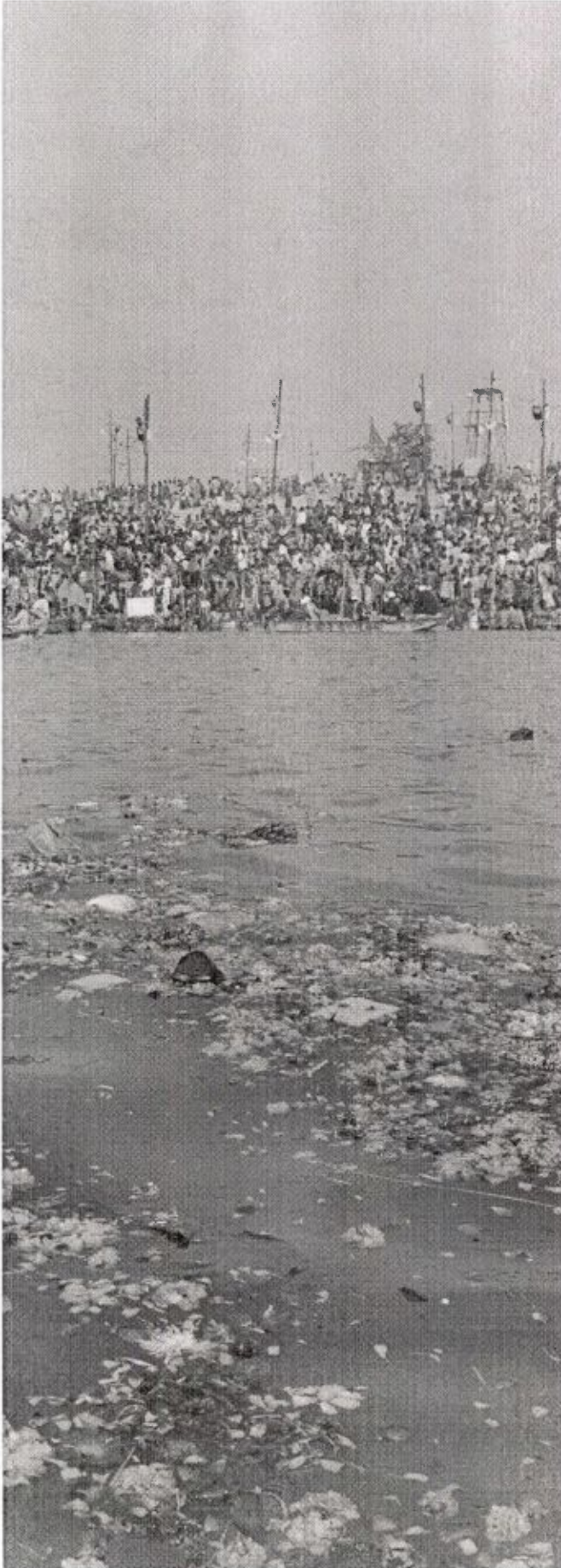
**CONTACT FOR FURTHER INFORMATION:**

**Suresh Kumar Rohilla, Programme Director**  
email: [srohilla@cseindia.org](mailto:srohilla@cseindia.org)



**Centre for Science and Environment**

41, Tughlakabad Institutional Area, New Delhi 110062  
Tel. 91 11 40616000 Fax. 29955879  
website: [www.cseindia.org](http://www.cseindia.org)



गंगा बेसिन में बसे शहरों में जल एवं  
अपशिष्ट पदार्थों पर  
शहरी स्थानीय निकायों का क्षमता निर्माण

**CAPACITY BUILDING OF URBAN LOCAL BODIES ON  
WATER AND WASTE IN GANGA BASIN CITIES**

परियोजना शीर्षक [PROJECT TITLE]: “गंगा बेसिन में छोटे पैमाने पर, ऑन-साइट अपशिष्ट जल एवं सेप्टेज प्रबंधन प्रणालियों हेतु शहरी स्थानीय निकायों व अन्य हितधारकों का क्षमता निर्माण”।

परियोजना की अवधि [DURATION OF PROJECT]: पांच वर्ष की संपूर्ण प्रक्रिया हेतु द्विवर्षीय आरंभिक चरण के रूप में रूपांकित किया गया।

परियोजना से जुड़ी मुख्य बातें [PROJECT HIGHLIGHTS]

- आवश्यक उपकरणों के साथ-साथ गुणवत्ता जांच एवं प्रासंगिक शोध का विकास एवं परिष्कार
- बिना नाली वाले इलाकों सहित पूरे शहर की स्वच्छता की योजना और प्रभावी अपशिष्ट जल उपचार एवं मल अपशिष्ट प्रबंधन (एफएसएम) के लिए प्रदर्शन परियोजनाओं की पहचान हेतु नगर स्तर पर शहरी स्थानीय निकायों और नगर के हितधारकों के साथ मिलकर कार्य आरम्भ करना
- स्थायी एवं किफायती अपशिष्ट जल एवं सेप्टेज प्रबंधन समाधान तलाशने और नदी बेसिन वाले शहरों पर जोर देने के साथ तीव्र उद्ग्रहण एवं मेनस्ट्रीमिंग हेतु प्रमाण-आधारित परिणामों को एक साथ रखने हेतु रूपांकित किया गया
- शहरों में रहने वाले गरीबों के लिए साफ-सफाई की स्थिति को बेहतर बनाना और शहर की जनस्वास्थ्य एवं पर्यावरणीय स्थिति में सुधार लाना
- इस हेतु, गंगा बेसिन के अधिक-से-अधिक क्षेत्रों तक पहुंचने के लिए सेंटर फॉर साइंस एंड एनवायरमेंट, नेशनल इंस्टीट्यूट अहफ अर्बन अफेयर्स (एनआईयूए) के बिल ऐंड मैलिंडा गेट्स फाउंडेशन क्षमता निर्माण केंद्र, स्वच्छ भारत अभियान और राष्ट्रीय स्वच्छ गंगा मिशन के साथ कंधे-से-कंधा मिलाकर कार्य करेगा





चरण 1 (अक्टूबर 2015 - सितंबर 2017), अंतिम अग्रवाल एनवायरमेंट ट्रेनिंग इंस्टीट्यूट, निमली, अलावर (राजस्थान) के आगामी स्कूल ऑफ वाटर ऐंड वेस्ट - सेटर फॉर साइंस एंड एनवायरमेंट, नई दिल्ली की क्षमता निर्माणकारी एवं शिक्षा संबंधित पहल - में भारत में स्थायी, विकेंद्रीकृत एवं किफायती अपशिष्ट जल प्रबंधन, शहर-व्यापी स्वच्छता और मल/सेटेज प्रबंधन पर शोध, नवप्रवर्तनशीलता एवं कार्यक्षमता हेतु नोडल केंद्र स्थापित करने में मदद करेगा।

**परियोजना के बारे में अवलोकन [PROJECT OVERVIEW]**

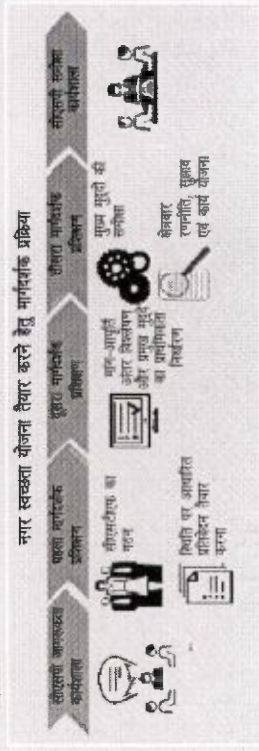
सेटर फॉर साइंस एंड एनवायरमेंट (सीएसई) की पहल, अपशिष्ट जल उपचार एवं मल/सेटेज प्रबंधन हेतु प्रमुख सरकारी एवं गैर-सरकारी कर्ताओं की क्षमता को बढ़ाने; विभिन्न तकनीकों की ऑन-साइट एवं ऑफ-साइट प्रदर्शन करने वाली आरंभिक/मॉडल परियोजनाओं को प्रयोगशाला-आधारित तकनीकी एवं दस्तावेजीकरण संबंधित सहायता प्रदान करने, और तकनीकी विकास, परिसण प्रोटोकॉल, निगरानी एवं डेटा प्रमाणिकरण प्रक्रियाओं का विकास करने का कार्य करेगा।

प्रस्तावित कदम गंगा नदी बेसिन में बसे शहरों के प्रदूषण को कम करने के सरकारी प्रयासों द्वारा प्रदत्त नीतिगत हस्तक्षेप एवं क्रियान्वयन अवसरों द्वारा समर्थित है। यह पहल स्वच्छ भारत अभियान (एसबीएन) और शहरों के कार्यालय और शहरी परिवर्तन के लिए अटल मिशन (अमृत) के अंतर्गत उपग्रहद्वीप की इस प्रमुख नदी को साफ करने, शहरों/नगरों को स्वच्छ बनाने के नवीकृत राष्ट्रीय प्रयासों पर आधारित है।

**दृष्टिकोण [THE APPROACH]**

**चरण 9 के प्रमुख कार्यों में निम्नलिखित शामिल हैं:**

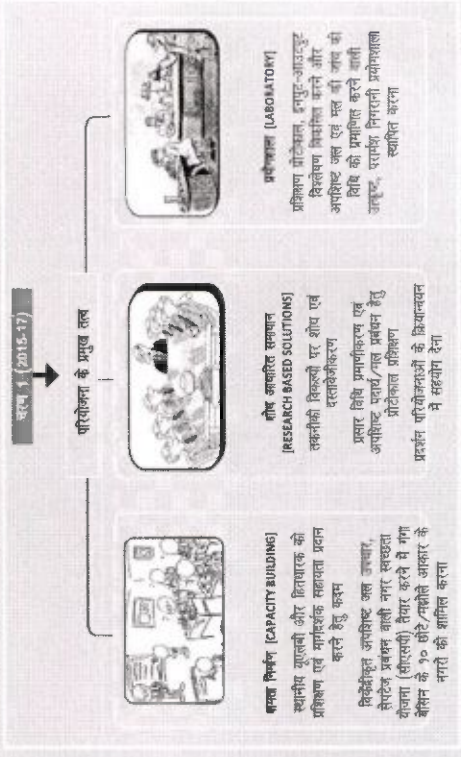
- सार्वजनिक अधिकारियों और संस्थानों का क्षमता निर्माण: गंगा बेसिन में बसे 10 छोटे/मझोले आकार के शहरों के शहरी स्थानीय निकायों (यूएलबी) तथा अन्य प्रमुख हितधारकों को विकेंद्रीकृत अपशिष्ट जल उपचार एवं मल प्रबंधन वाली नगर स्वच्छता योजना (सीएसपी) तैयार करने में प्रशिक्षण एवं मार्गदर्शक सहायता।



- तकनीकी विकल्पों पर शोध-आधारित समाधान और प्रदर्शन परियोजनाएं: विकेंद्रीकृत अपशिष्ट जल एवं सेटेज प्रबंधन तकनीकों, विधि प्रमाणिकरण और परिसण प्रोटोकॉल पर शोध एवं दस्तावेजीकरण, और शिक्षण उपकरणों के रूप में प्रदर्शन परियोजनाओं के क्रियान्वयन में सहायता देना।

- स्वतंत्र प्रयोगशाला की स्थापना: मौजूदा प्रयोगशालाओं को उन्नत बनाया जायेगा, ताकि संसाधन-संपन्न एवं परामर्श, पर्यावरणीय निगरानी प्रयोगशाला स्थापित की जा सके, जहां पानी एवं अपशिष्ट पदार्थों के जैविक एवं रसायनिक दूषणकारी तत्वों की जांच की जा सके। यह प्रयोगशाला गंगा बेसिन के लक्षित स्थानों के प्रमुख दूषण मानकों पर नियमित रूप से निगरानी रखेगी। यह बड़े धमने पर हितधारकों - शहरी स्थानीय निकायों (यूएलबी), जल निगम, पीएचडी ईजीनियर्स, जुनिटा नियामक अधिकरणों एवं नगर विकास प्राधिकरणों व अन्य की क्षमताओं के निर्माण में सहायता प्रदान करेगी। चरण 9 के तीन प्रमुख कारक निम्नलिखित हैं:

चरण 1 में परियोजना के तहत हस्तक्षेप की मीट रूखी जायेगी, जिसमें आवश्यक उपकरणों का विकास एवं जुगवता जांच व उपयोगी शोध किये जाएंगे, और बिना नाली वाले इलाकों सहित पूरे शहर की सफाई की योजना और प्रभावी अपशिष्ट जल उपचार एवं एकसंयम के लिए प्रदर्शन परियोजनाओं को पहचान हेतु नगर स्तर पर शहरी स्थानीय निकायों और नगर के हितधारकों के साथ मिलकर कार्य करना आरम्भ किया जाएगा।





इसके अलावा, पर्यावरण निगरानी प्रयोगशाला शहरी स्थानीय निकायों (यूएलबी), जल निगम, जल एवं अपशिष्ट पदार्थ साधनों, पीएचईडी, संबंधित विनियामक अभिकरणों को लक्षित प्रशिक्षण प्रदान करेगी और इस क्षेत्र में कार्य करने वाली अन्य प्रयोगशालाओं के तकनीकी कर्मचारियों की क्षमता का भी निर्माण करेगी, ताकि वे अपशिष्ट जल एवं मल के परिणामों की व्याख्या कर सकें। इससे भारत में स्थायी, विकेंद्रीकृत एवं किफायती अपशिष्ट जल प्रबंधन, शहर-व्यापी स्वच्छता और अपशिष्ट पदार्थ/सेप्टेज प्रबंधन पर शोध, नवप्रवर्तन एवं अभ्यास हेतु नोडल केंद्र स्थापित करने में मदद मिलेगी।

यह परियोजना निम्नलिखित कार्यों पर केंद्रित होगी:

- स्वच्छ भारत अभियान के अंतर्गत राज्य कार्यक्रम प्रबंधन इकाइयों, राष्ट्रीय स्वच्छ गंगा अभियान के तहत निर्मित कार्याकल्प और शहरी परिवर्तन पर अटल मिशन और राज्य स्तरीय कार्यक्रम प्रबंधन समूहों (एसपीएमजी) के साथ कार्य करने से राज्य स्वच्छता रणनीति एवं नगर स्वच्छता योजना को समन्वित करने में मदद मिलेगी।
- साथ ही, इसमें गंगा नदी बेसिन में बसे 50,000 - 100,000 की आबादी वाले ऐसे द्वितीयक नगरों (छोटे और मझोले) व शहरों का क्षमता निर्माण भी शामिल है, जो मुख्य रूप से ऑन-साइट स्वच्छता पर निर्भर हैं, अन्यथा वे अमृत मिशन से बाहर रह जायेंगे।
- यह प्रोग्राम बिल ऐंड मेलिंडा गेट्स फाउंडेशन (बीएमजीएफ) भागीदारों सहित दूसरों द्वारा विकसित उपकरणों का उपयोग करने का तरीका बतायेगा, ताकि यूएलबी अधिकारियों के क्षमता निर्माण में सहायता की जा सके और सीएसपी तैयारी की प्रक्रिया को मजबूत बनाया जा सके।
- यही नहीं, सेंटर फॉर साइंस एंड एनवायरमेंट (सीएसई), निमली (अलवर, राजस्थान) के स्कूल ऑफ वाटर ऐंड वेस्ट में स्थापित की जाने वाली अपनी तरह की पहली अपशिष्ट पदार्थ परामर्श प्रयोगशाला शहरी स्थानीय निकायों, जल निगम, पानी और अपशिष्ट उपयोगिताओं, पीएचईडी, संबंधित विनियामक अभिकरणों एवं नगर विकास प्राधिकरणों को लक्षित प्रशिक्षण प्रदान करेगी और इस क्षेत्र में कार्य करने वाली अन्य प्रयोगशालाओं के तकनीकी कर्मचारियों की क्षमता का भी निर्माण करेगी, ताकि वे अपशिष्ट जल एवं मल के परिणामों की व्याख्या कर सकें।

यह पहल 'BILL AND MELINDA GATES FOUNDATION' द्वारा समर्थित है

अधिक जानकारी हेतु संपर्क करें:

सुरेश कुमार रोहिल्ला, कार्यक्रम निदेशक

ईमेल: srohilla@cseindia.org



सेंटर फॉर साइंस एंड एनवायरमेंट (सीएसई)

41, तुगलकाबाद, इंस्टीट्यूशनल एरिया, नई दिल्ली 110062,

दूरभाष: 91 11 40616000, फैक्स: 29955879

वेबसाइट: www.cseindia.org



Centre for Science and Environment

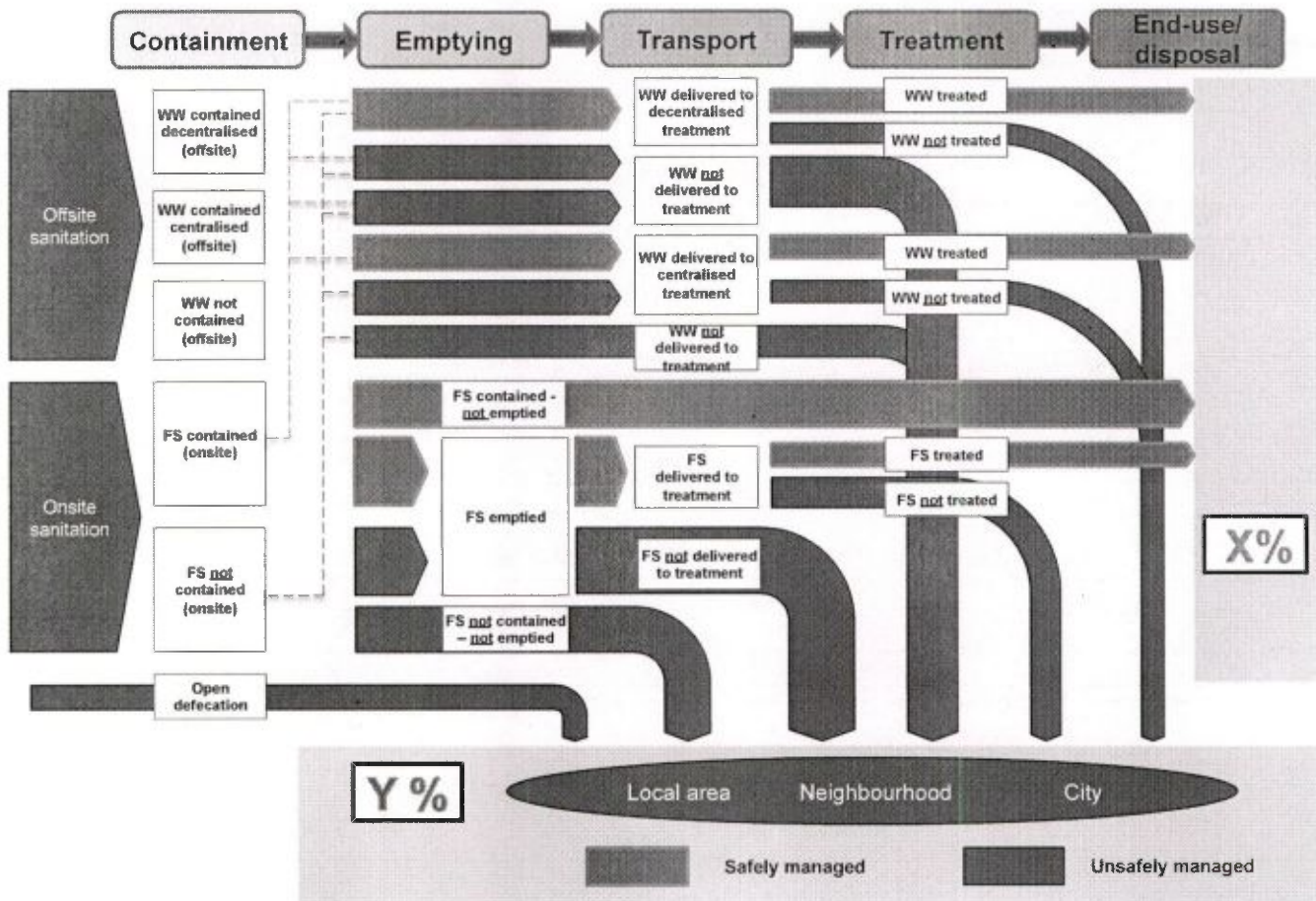
## Promoting excreta (sewage and septage) flow analysis to inform urban sanitation programming at a city-wide scale



SFD- Shit Flow Diagram

City name and date of production  
Desk based / field based

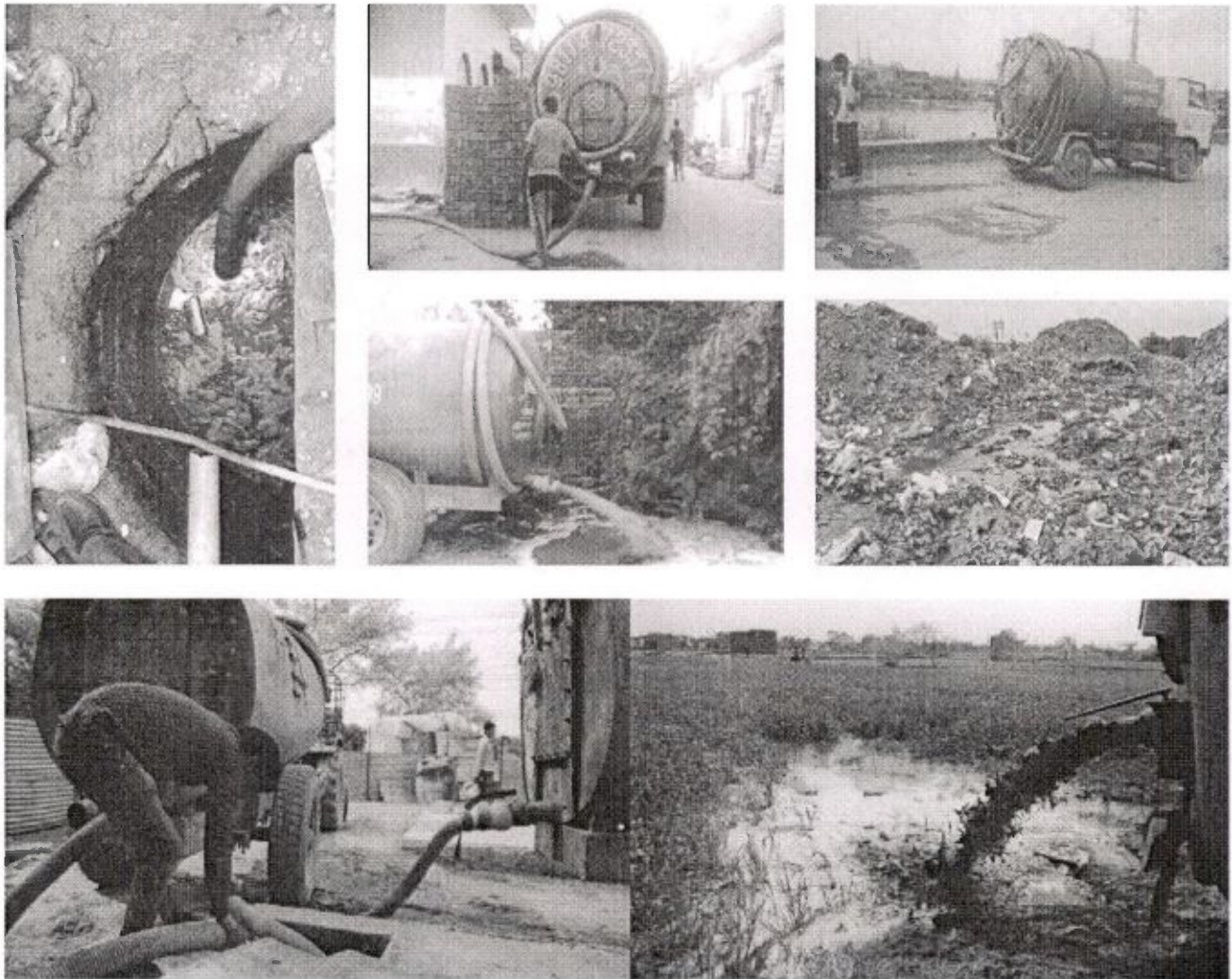
### SFD- Shit Flow Diagram



### What is an SFD?

An excreta flow diagram (also often described as shit flow diagram, SFD) is a tool to readily understand and communicate visualizing how excreta physically flow through a city or town. It shows how excreta are or is not contained as it moves from defecation to disposal or end-use, and the fate of all excreta generated. An accompanying report describes the service delivery context of the city or town.

It is	It is NOT
<ul style="list-style-type: none"> <li>• A tool for engineers, planners and decision-makers</li> <li>• Based on contributing populations and an indication of where their excreta (septage or sewage) goes</li> <li>• A representation of public health hazard</li> <li>• An effective communications and advocacy tool</li> <li>• An overview from which to develop sanitation priorities</li> </ul>	<ul style="list-style-type: none"> <li>• Based on actual volumes/mass – these are determined by other related factors</li> <li>• A representation of public health risk (risk = hazard x behavior)</li> <li>• A precise scientific analytical tool</li> </ul>



### **Purpose of an SFD**

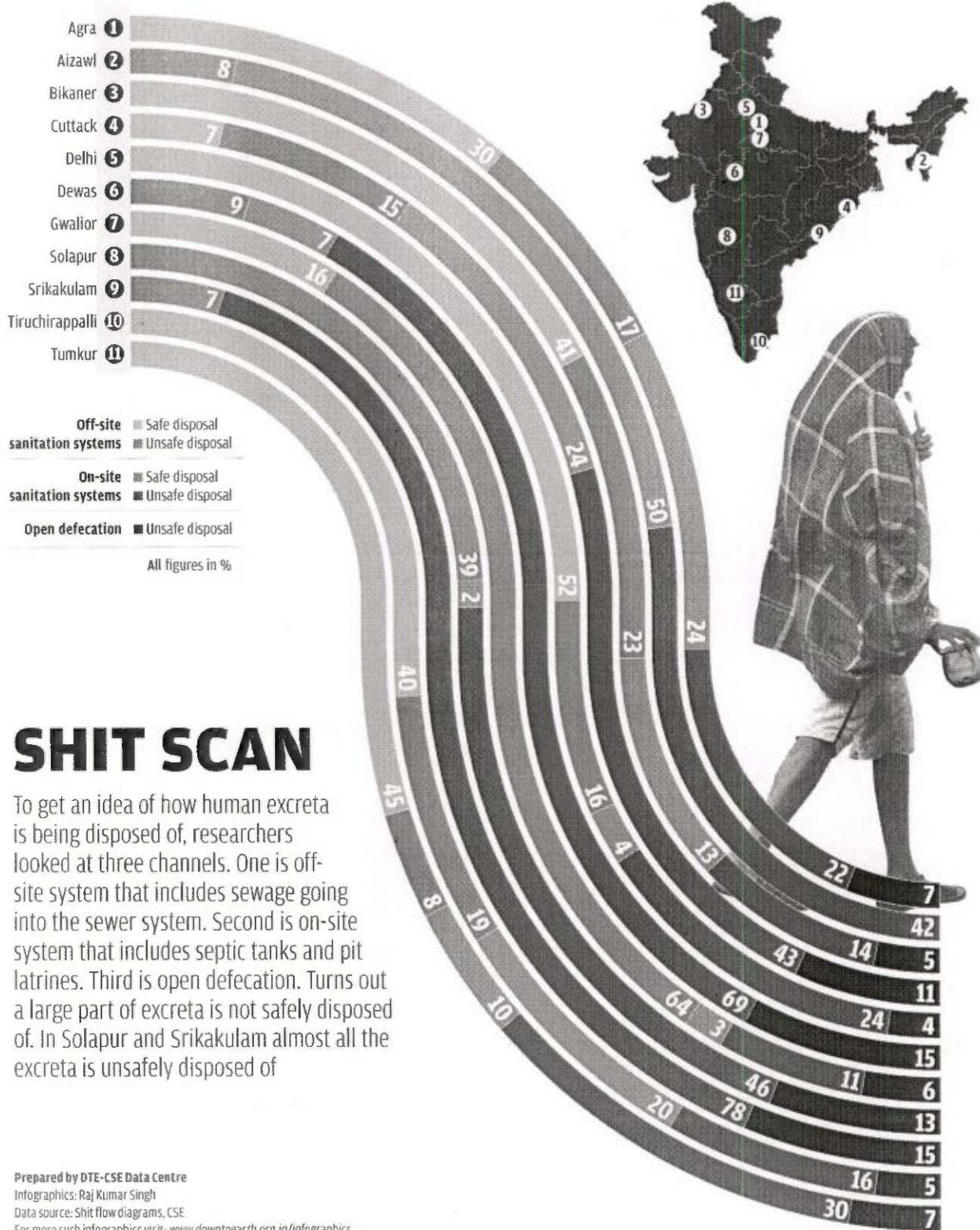
SFDs are a useful tool to inform urban sanitation programming. They offer an innovative way to engage city stakeholders like political leaders, sanitation experts and civil society organizations in a coordinated dialogue about excreta management. They can also be used for advocacy.

### **The SFD Promotion Initiative**

The main objective of the SFD Promotion Initiative is to continue further development of the SFD approach. This approach includes standardized guidance – a methodology and tools - for the easy production of standardized SFDs, backed by a description of information sources and the enabling environment in the city concerned.

The initiative aimed to test the approach in 50 cities in Africa, Asia and Latin America and, for the benefit of sanitation practitioners, decision-makers and civil society across the globe, the result is disseminated via the SFD web portal hosted by the Sustainable Sanitation Alliance (SuSanA) platform ([www.sfd.susana.org](http://www.sfd.susana.org)). The initiative is being managed by The Global Sector Program on Sustainable Sanitation of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ GmbH) under the umbrella of the Sustainable Sanitation Alliance (SuSanA). Since November 2014, GIZ has been supported by the Bill & Melinda Gates Foundation.

# How Indian cities perform in Excreta (septage and sewage) Management?



## SHIT SCAN

To get an idea of how human excreta is being disposed of, researchers looked at three channels. One is off-site system that includes sewage going into the sewer system. Second is on-site system that includes septic tanks and pit latrines. Third is open defecation. Turns out a large part of excreta is not safely disposed of. In Solapur and Srikakulam almost all the excreta is unsafely disposed of

Prepared by DTE-CSE Data Centre  
 Infographics: Raj Kumar Singh  
 Data source: Shit flow diagrams, CSE  
 For more such infographics visit: [www.downtoearth.org.in/infographics](http://www.downtoearth.org.in/infographics)



## About CSE & Background of Research

Centre for Science and Environment (CSE) is New Delhi based independent public research organization that aims to analyze and study the relationship between environment and development and create public consciousness about the need for sustainable development. The centre was set up in 1980 and is globally acknowledged for its intellectual leadership, policy advocacy and capacity building.

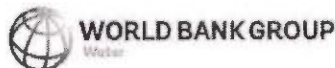
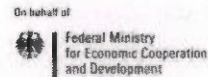
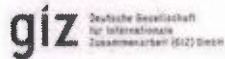
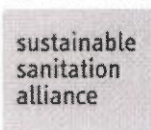
In 2012 CSE has published 7<sup>th</sup> report - India's first and most comprehensive survey of water and sewage management in a two volume set publication title - 'Excreta Matters'. The publication is based on data and information collected from over 71 cities in different agro-climatic zones on all aspects of water management (sourcing, treatment (water and waste), supply, pricing and equity etc). The book outlines an approach towards sustainable water and sewage management in Indian cities.

In 2012-2013 the Water and Sanitation Program (WSP) of the World Bank carried out an analysis of excreta management in 12 cities and developed new tools for assessing the context and outcomes relating to the flow of excreta through the city.

Building on this work, in 2014 the centre partnered with a group of institutions active in the field of excreta management to promote excreta flow analysis (septage and sewage) to inform urban sanitation programming through the service delivery assessment tool - Shit Flow Diagrams (SFDs), developed by Water and Sanitation Programme - World Bank. CSE has prepared SFDs for 11 cities in India as part of the above initiative.

## SFD Promotion Initiative - Consortium Partners

SFD Promotion Initiative



### Contact for further information

Dr Suresh Kumar Rohilla, Programme Director-Water Management (srohilla@cseindia.org)  
 Bhitush Luthra, Senior Research Associate (bhitush@cseindia.org)  
 Centre for Science and Environment, 41-Tuglakabad Institutional Area, New Delhi-110062  
 Tel. 91- 11 -40616000 Fax. 91-11-29955879 Website: www.cseindia.org



Manindra Nath Pradhan &lt;wbsudadir@gmail.com&gt;

TA  
6/6/16**Sensitisation Workshop cum Regional Conclave – Regarding Handholding Support for Preparation of City Sanitation Plans and Effective Septage and Faecal Sludge Management’ on dated: 18-19 July, 2016 at Delhi**

Swachhganga Cseindia &lt;swachhganga@cseindia.org&gt;

Thu, Jun 16, 2016 at 2:30 PM

To: cs-westbengal@nic.in

Cc: psecyud@wb.nic.in, wbsudadir@gmail.com, diramrutwb@gmail.com, programdirector.spmg@gmail.com, chairmanbm@gmail.com, bansb\_04@yahoo.com, Suresh Kumar Rohilla &lt;srohilla@cseindia.org&gt;, "Dr. Ramesh PK Nair" &lt;ramesh@cseindia.org&gt;, Rajratna Sardar &lt;rajratna@cseindia.org&gt;, Mahreen Matto &lt;mahreen@cseindia.org&gt;, Bhitush Luthra &lt;bhitush@cseindia.org&gt;, Shachi Pandey &lt;shachi@cseindia.org&gt;, Shantanu Kumar Padhi &lt;shantanu@cseindia.org&gt;, Ridhima Gupta &lt;ridhima@cseindia.org&gt;

To

**Mr Basudeb Banerjee, IAS**

Chief Secretary

Government of West Bengal

"NABANNA" HRBC Building, 325, Sarat Chatterjee Road

Howrah – 711 102

West Bengal

**Subject: Sensitization Workshop cum Regional Conclave – Regarding Handholding Support for Preparation of City Sanitation Plans and Effective Septage and Faecal Sludge Management’ on dated: 18-19 July, 2016 at Delhi.**

Dear Sir/Madam,

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Centre for Science and Environment (CSE), New Delhi in partnership and support of Swachh Bharat Mission (SBM), Ministry of Urban Development and National Mission Clean Ganga (NMCG), Ministry of Water Resources for River Development and Ganga Rejuvenation, Government of India are organising a two day workshop cum regional conclave of state mission Directors of SBM /AMRUT, SPMG – NMCG, Mayors and Commissioners of the target flagship cities/towns.

The capacity building initiative is aimed at capacitating urban local bodies and other

stakeholders and to help achieve convergence of NMCG – Namami Gange AMRUT, SBM – ODF cities programme in identified flagship town /cities by planning for city wide sanitation including non-sewered areas and identification of interventions for effective wastewater /septage management.

The workshop will be held at 18-19 July at Magnolia Hall, India Habitat Centre, Lodhi Road, New Delhi. You are requested to nominate the State Mission Director – AMRUT, SBM, SPMG – NMCG as well as Mayor and Commissioner from target town/cities identified by ministry in your state – **refer attached list of town/cities.**

The workshop organisers will reimburse economy class airfare / 2 A.C train fare on production of valid receipts (tickets and boarding cards), local travel and arrange accommodation for all the invited participants. Each town is expected to be represented by at least 1-2 senior functionaries on both the days and actively participate in the workshop.

May I request you to nominate the senior functionaries of state and target towns /cities. Please send confirmation of nomination and participation **latest by 5<sup>th</sup> July, 2016** addressed to workshop coordinator- Mr Ramesh Nair, Programme Manager – Water Management (email: ramesh@cseindia.org, Fax. 011 29955879, tel. 40616000 mobile: 88008 70288), CSE – 41 Tuglakabad Institutional Area, New Delhi 110062 with a copy to undersigned and intimation to Mission Director, SBM – MoUD as well as NMCG – MoWRD&GR.

If you require any clarification please do not hesitate to contact undersigned.

Yours Sincerely,

**Suresh Kumar Rohilla**

Programme Director- Water Management

Centre for Science and Environment, New Delhi

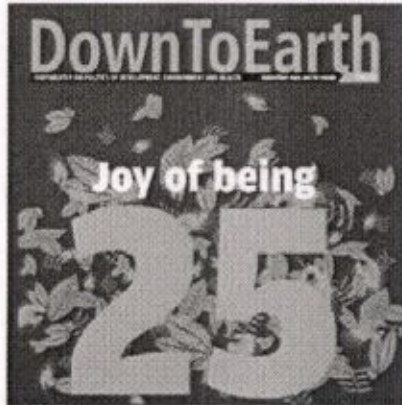
**Copy to:**

- **Dr Rajat Bhargava, IAS**, Joint Secretary & Mission Director, National Mission on Clean Ganga, Ministry of Water Resources, River Development & Ganga Rejuvenation, New Delhi
- **Mr Praveen Prakash, IAS**, Joint Secretary & Mission Director SBM, Ministry of Urban Development, New Delhi
- **Mr Debashis Sen, IAS**, Principal Secretary, Urban Development Department, West Bengal
- **Mr M.N. Pradhan, IAS**, Director- Swachh Bharat Mission (U), Director State Urban Development Agency (SUDA), Directorate of Local Bodies, West Bengal
- **Mr Mitra Chatterjee, IAS**, Mission Director- AMRUT, Department of Municipal Affairs, West Bengal
- **Mr Sutanu Prasad Kar, IAS**, Programme Director, SPMG (West Bengal) State NGRBA Programme, Management Group (SPMG), Urban Development Department, West




Bengal

- **Mr Sankar Addhya**, Chairperson, Bongaon Municipality, West Bengal
- **Mr Arijita Sil (Sarkar)**, Chairperson, Bansberia Municipality, West Bengal
- **Mr Amar Singh Rai**, Chairman, Darjeeling Municipality, West Bengal



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6273K

# CENTRE FOR SCIENCE AND ENVIRONMENT

MAIN OFFICE: 41, Tughlakabad Institutional Area, New Delhi-110 062 INDIA  
Tel: 2995 5124, 2995 6110, 2995 6394, 2995 6399 Fax: 91-11-2995 5879 Email: cse@cseindia.org Website: www.cseindia.org  
BRANCH OFFICE: Core 6A, Fourth Floor, India Habitat Centre, Lodhi Road, New Delhi-110 003  
Tel: 2464 5334, 2464 5335



LEAVES  
OF  
IMPORTANT  
SURVIVAL  
TREES  
IN  
INDIA —  
MAHUA,  
KHEJD,  
ALDER,  
PALMYRA  
AND  
OAK

Ref.No: CSE\_GangaBasinProject\_2016\_11

Dated: June 15, 2016

Suresh Kumar Rohilla  
Programme Director - Water Management  
Email: srohilla@cseindia.org

Email/ Fax

**Subject: Sensitization Workshop cum Regional Conclave – Regarding Handholding Support for Preparation of City Sanitation Plans and Effective Septage and Faecal Sludge Management’ on dated: 18-19 July, 2016 at Delhi.**

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WILLIAM BISSELL



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If you require any clarification please do not hesitate to contact undersigned.

Yours sincerely,

(Suresh Kumar Rohilla)

To

**Mr Basudeb Banerjee, IAS**  
Chief Secretary  
Government of West Bengal  
"NABANNA" HRBC Building, 325, Sarat Chatterjee Road  
Howrah – 711 102  
West Bengal

Copy to –

Principal Secretary UD/MA  
Mission Director (SBM) of target states  
Mission Director (AMRUT) of target states  
Head, SPMG – NMCG of target states  
Mayors & Commissioners of target town/cities  
Mission Director SBM – MoUD  
Mission Director NMCG – MoWR, RD&GR

Copy to:

**Dr Rajat Bhargava, IAS**

Joint Secretary & Mission Director  
National Mission on Clean Ganga  
Ministry of Water Resources, River Development & Ganga Rejuvenation  
Rear Wing, MDSS, 9-C.G.O. Complex  
Lodhi Road, New Delhi- 110 003

**Mr Praveen Prakash, IAS**

Joint Secretary & Mission Director SBM  
Ministry of Urban Development  
140-C, Nirman Bhawan  
New Delhi- 110 011

**Mr Debashis Sen, IAS**

Principal Secretary  
Urban Development Department  
Nagarayan, DF-8, Sector – 1  
Kolkata- 700 064  
West Bengal

**Mr M.N. Pradhan, IAS**

Director- Swachh Bharat Mission (U)  
Director State Urban Development Agency (SUDA)  
Directorate of Local Bodies, Purta Bhawan, Salt Lake  
Kolkata – 700 091  
West Bengal

**Mr Mitra Chatterjee, IAS**

Mission Director- AMRUT  
Department of Municipal Affairs, Writers' Buildings  
Kolkata 700 001  
West Bengal

**Mr Sutanu Prasad Kar, IAS**

Programme Director  
SPMG (West Bengal) State NGRBA Programme  
Management Group (SPMG)  
Urban Development Department  
Government of West Bengal  
'NAGARAYAN', 6th Floor, DF-8  
Sector- i, Salt Lake City  
Kolkata- 700 064  
West Bengal

**Mr Sankar Addhya**

Chairperson  
Bongaon Municipality  
School Road  
Bongaon, 24 Pargan North - 743 235  
West Bengal

**Mr Arijita Sil (Sarkar)**  
Chairperson  
Bansberia Municipality  
Rudra Main Road , PO - Bansberia  
Hooghly - 712 502.  
West Bengal

**Mr Amar Singh Rai**  
Chairman  
Darjeeling Municipality  
Laden-la Road  
Darjeeling - 734101  
West Bengal

**List of Ganga basin towns/cities from the Uttarakhand, Uttar Pradesh, Bihar and West Bengal states-**

Sr.No.	City	District	State
1	Rishikesh	Dehradun	Uttarakhand
2	Chunar	Mirzapur	Uttar Pradesh
3	Ramnagar	Varanasi	Uttar Pradesh
4	Ganga ghat	Unnao	Uttar Pradesh
5	Bijnor	Bijnor	Uttar Pradesh
6	Muzaffarpur	Muzaffarpur	Bihar
7	Katihar	Katihar	Bihar
8	Buxar	Buxar	Bihar
9	Bodh Gaya	Gaya	Bihar
10	Bansberia	Hugli	West Bengal
11	Bongaon	North 24 Pargana	West Bengal
12	Darjiling	Darjiling	West Bengal

**List of other towns/cities**

Sr.No.	City	District	State
1	Agra	Agra	Uttar Pradesh
2	Aizawl	Aizawl	Mizoram
3	Bikaner	Bikaner	Rajasthan
4	Cuttack	Cuttack	Odisha
5	Delhi	Delhi	Delhi
6	Dewas	Dewas	Madhya Pradesh
7	Gwalior	Gwalior	Madhya Pradesh
8	Solapur	Solapur	Maharashtra
9	Srikakulam	Srikakulam	Andhra Pradesh
10	Tiruchirappalli	Tiruchirappalli	Tamil Nadu
11	Tumkur	Tumkur	Karnataka



## CAPACITY BUILDING OF URBAN LOCAL BODIES ON **WATER AND WASTE IN GANGA BASIN CITIES**

**PROJECT TITLE:** "Capacitating urban local bodies and other stakeholders in the Ganga basin on small scale, on-site wastewater and septage management systems".

**DURATION OF PROJECT:** Designed as a two-year kick-start phase for an overall 5-year process.

### PROJECT HIGHLIGHTS

- Develop and refine the necessary tools as well as quality checks and contextual research.
- Initiate city level engagement with Urban Local Bodies and city stakeholders to both, plan for city-wide sanitation including non-sewered areas, and identification of demonstration projects for effective wastewater treatment and FSM.
- Designed to find sustainable and affordable wastewater and septage management solutions and to put together evidence-based results for rapid uptake and mainstreaming, with an emphasis on cities in a river basin.
- Improve the sanitation situation of poor urban dwellers as well as improve the public health and environmental status of the city.
- For this, CSE will work in close coordination with the Bill & Melinda Gates Foundation capacity building hub at National Institute of Urban Affairs (NIUA), Swacch Bharat Mission and National Mission for Clean Ganga for wider outreach in the Ganga basin.



Phase I (October 2015- September 2017) will help seed a nodal centre for research, innovation and practice on sustainable, decentralized and affordable wastewater management, city wide sanitation and faecal sludge/septage management in India at the upcoming School of Water and Waste at the Anil Agarwal Environment Training Institute at Nimli, Alwar (Rajasthan) – a capacity building and education initiative of the Centre for Science for Science and Environment, New Delhi.

#### PROJECT OVERVIEW

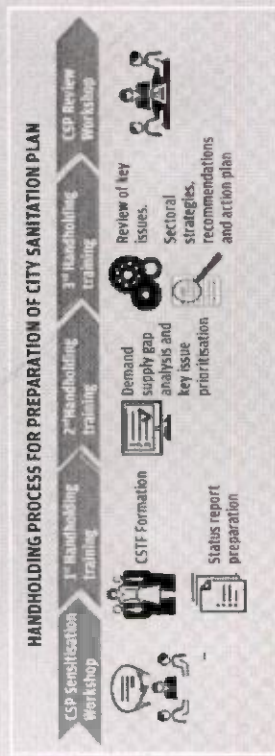
Centre for Science and Environment's (CSE) initiative will capacitate key state and non-state actors; provide laboratory-based technical and documentation support to pilot/model projects that offer on-site & off-site demonstration of various technologies, and develop technology options, testing protocols, monitoring and data validation procedures for wastewater treatment and septage/faecal sludge management.

The proposed measures ride on the policy intervention and implementation opportunities provided by the government's push for pollution abatement in the cities of the Ganga River basin as part of the rejuvenated national efforts to clean this major river in the sub-continent. Clean town/cities under the Swacch Bharat Mission (SBM) and the Atal Mission on Rejuvenation and Urban Transformation (AMRUT).

#### THE APPROACH

##### Key work packages in Phase I include the following:

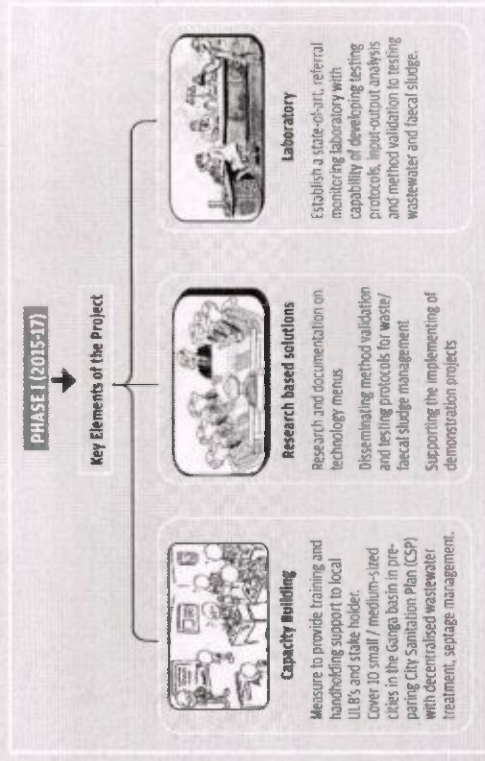
- Capacitating public functionaries and institutions: training and handholding support to Urban Local Bodies (ULBs) and other key stakeholders from 10 small / medium-sized cities in the Ganga basin in preparing City Sanitation Plan (CSP) with decentralized wastewater treatment and septage management.



- Research-based solutions on technology options, and demonstration projects: research and documentation on decentralized wastewater and septage management technologies, method validation and testing protocols, and supporting the implementation of demonstration projects as learning tools.

- Establishing an independent laboratory: existing lab facilities will be upgraded to establish a resource and referral, environmental monitoring laboratory with the capability to test for a range of biological and chemical contaminants in water and waste. The lab will regularly monitor key pollution parameters from targeted sites in the Ganga basin. It will help build capacities of a wide range of stakeholders – ULBs, Jal Nigam, PHED engineers, select regulatory agencies and city development authorities, among others. Three key elements of the project in the phase I are as follows :

Phase I will lay the foundation for the intervention, in that it will develop and refine the necessary tools as well as quality checks and contextual research, and initiate city level engagement with ULBs and city stakeholders to both, plan for city-wide sanitation including non-sewered areas, and identification of demonstration projects for effective wastewater treatment and FSM. In







addition, the Environmental Monitoring Lab will conduct targeted trainings for ULBs, Jal Nigam, water & waste utilities, PHED, relevant regulatory agencies and city development authorities, and also help capacitate technical staff of other labs, working in the sector in interpreting results for wastewater and faecal sludge. This will help seed a nodal centre for research, innovation and practice on sustainable, decentralized and affordable wastewater management, city wide sanitation and faecal sludge/septage management in India.

**The project will focus on**

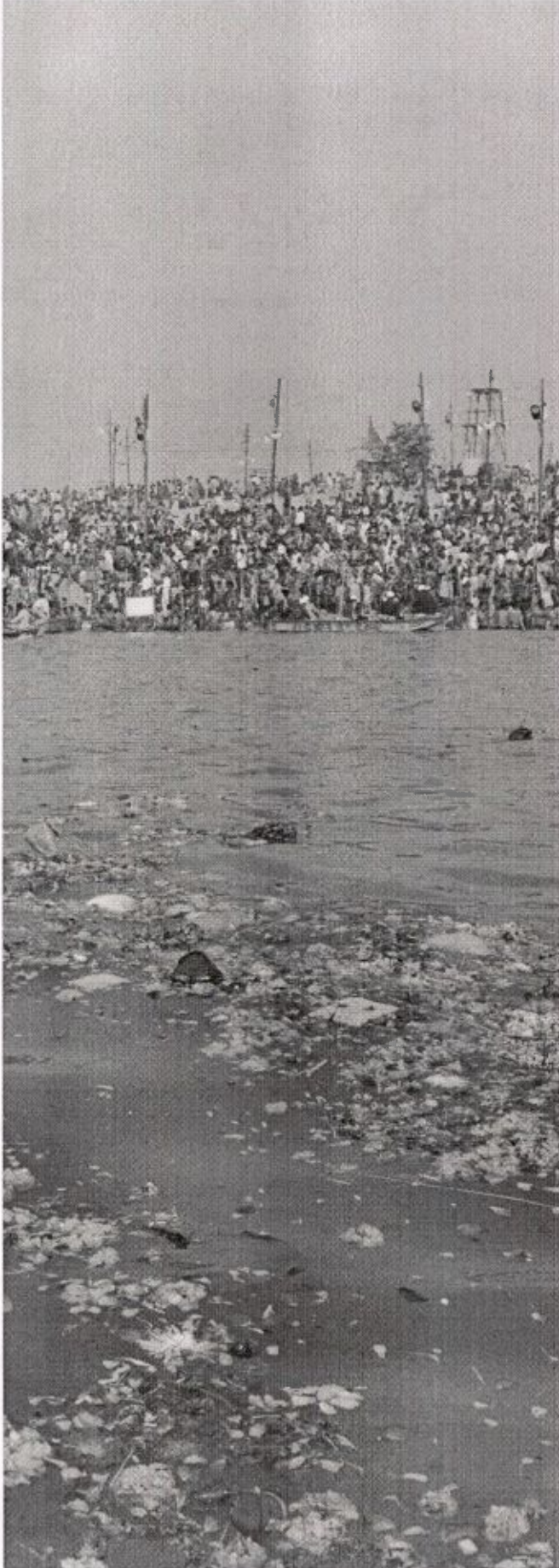
- Working with the State Programme Management Units under Swachh Bharat Mission, Atal Mission for Rejuvenation and Urban Transformation as well as State Level Programme Management Groups (SPMG), created under National Mission for Clean Ganga help the convergence of state sanitation strategy and city sanitation planning.
- Also, it includes capacitating of secondary cities (small and medium) and towns between 50,000-100,000 population in river Ganga basin that mainly depend on on-site sanitation, which will otherwise remain outside the AMRUT mission.
- The programme will explore how to use tools developed by others, including BMGF partners, to help capacitate ULB officials and strengthen the process of CSP preparation.
- In addition, the first of its kind faecal waste referral laboratory to be set up at the School of Water and Waste at CSE Environment Training Institute, Nimli (Alwar, Rajasthan) will conduct targeted trainings for the urban local bodies, Jal Nigam, water and waste utilities, PHED, relevant regulatory agencies and city development authorities, and also help capacitate technical staff of other labs, working in the sector in interpreting results for wastewater and faecal sludge.

**THE INITIATIVE IS SUPPORTED BY: BILL AND MELINDA GATES FOUNDATION**

**CONTACT FOR FURTHER INFORMATION:**  
Suresh Kumar Rohilla, Programme Director  
email: [srohilla@cseindia.org](mailto:srohilla@cseindia.org)



**Centre for Science and Environment**  
41, Tughlakabad Institutional Area, New Delhi 110062  
Tel. 91 11 40616000 Fax. 29955879  
website: [www.cseindia.org](http://www.cseindia.org)



गंगा बेसिन में बसे शहरों में जल एवं  
अपशिष्ट पदार्थों पर  
शहरी स्थानीय निकायों का क्षमता निर्माण

**CAPACITY BUILDING OF URBAN LOCAL BODIES ON  
WATER AND WASTE IN GANGA BASIN CITIES**

परियोजना शीर्षक [PROJECT TITLE]: “गंगा बेसिन में छोटे पैमाने पर, ऑन-साइट अपशिष्ट जल एवं सेप्टेज प्रबंधन प्रणालियों हेतु शहरी स्थानीय निकायों व अन्य हितधारकों का क्षमता निर्माण”।

परियोजना की अवधि [DURATION OF PROJECT]: पांच वर्ष की संपूर्ण प्रक्रिया हेतु द्विवर्षीय आरंभिक चरण के रूप में रूपांकित किया गया।

परियोजना से जुड़ी मुख्य बातें [PROJECT HIGHLIGHTS]

- आवश्यक उपकरणों के साथ-साथ गुणवत्ता जांच एवं प्रासंगिक शोध का विकास एवं परिष्कार
- बिना नाली वाले इलाकों सहित पूरे शहर की स्वच्छता की योजना और प्रभावी अपशिष्ट जल उपचार एवं मल अपशिष्ट प्रबंधन (एफएसएम) के लिए प्रदर्शन परियोजनाओं की पहचान हेतु नगर स्तर पर शहरी स्थानीय निकायों और नगर के हितधारकों के साथ मिलकर कार्य आरम्भ करना
- स्थायी एवं किफायती अपशिष्ट जल एवं सेप्टेज प्रबंधन समाधान तलाशने और नदी बेसिन वाले शहरों पर जोर देने के साथ तीव्र उद्ग्रहण एवं मेनस्ट्रीमिंग हेतु प्रमाण-आधारित परिणामों को एक साथ रखने हेतु रूपांकित किया गया
- शहरों में रहने वाले गरीबों के लिए साफ-सफाई की स्थिति को बेहतर बनाना और शहर की जनस्वास्थ्य एवं पर्यावरणीय स्थिति में सुधार लाना
- इस हेतु, गंगा बेसिन के अधिक-से-अधिक क्षेत्रों तक पहुंचने के लिए सेंटर फॉर साइंस एंड एनवायरमेंट, नेशनल इंस्टीट्यूट अहमद अबन अफेयर्स (एनआईयूए) के बिल ऐंड मेलिंडा गेट्स फाउंडेशन क्षमता निर्माण केंद्र, स्वच्छ भारत अभियान और राष्ट्रीय स्वच्छ गंगा मिशन के साथ कंधे-से-कंधा मिलाकर कार्य करेगा



चरण 1 (अक्टूबर 2015 - सितंबर 2017), अनिल अग्रवाल एनवायरमेंट ट्रेनिंग इंस्टीट्यूट, निमली, अलावर (राजस्थान) के आगामी स्कूल ऑफ वाटर एंड नेट - सेंटर फॉर साइंस एंड एनवायरमेंट, नई दिल्ली की क्षमता निर्माणकारी एवं शिक्षा संबंधित पहल - में भारत में स्थायी, विकेंद्रीकृत एवं डिशायटी अपशिष्ट जल प्रबंधन, शहर-व्यापी स्वच्छता और मल/सेटेल प्रबंधन पर शोध, नवप्रवर्तनशीलता एवं कार्यक्षमता हेतु नोडल केंद्र स्थापित करने में मदद करेगा।

परियोजना के बारे में अरबोक्व [PROJECT OVERVIEW] सेंटर फॉर साइंस एंड एनवायरमेंट (सीएसई) की पहल, अपशिष्ट जल उपचार एवं मल/सेटेल प्रबंधन हेतु प्रमुख सरकारी एवं गैर-सरकारी कर्ताओं की क्षमता को बढ़ाने; विभिन्न तकनीकों की ऑन-साइट एवं ऑफ-साइट प्रदर्शन करने वाली आरम्भिक/मॉडल परियोजनाओं को प्रयोगशाला-आधारित तकनीकी एवं दस्तावेजीकरण संबंधित सहजता प्रदान करने, और तकनीकी विकास, परिष्करण प्रोटोकॉल, निगरानी एवं डेटा प्रणालीकरण प्रक्रियाओं का विकास करने का कार्य करेगा।

प्रस्तावित कदम गंगा नदी बेसिन में बसे शहरों के प्रदूषण को कम करने के सरकारी प्रयासों द्वारा प्रदत्त नीतिगत हस्तक्षेप एवं क्रियान्वयन अवसरों द्वारा समर्थित है। यह पहल स्वच्छ भारत अभियान (एसबीएस) और शहरों के कायाकल्प और शहरी परिवर्तन के लिए अटल मिशन (समूह) के अंतर्गत उपमहादीप की इस प्रमुख नदी को साफ करने, शहरों/नगरों को स्वच्छ बनाने के नवीकृत राष्ट्रीय प्रयासों पर आधारित है।

#### दृष्टिकोण [THE APPROACH]

#### चरण 9 के प्रमुख कार्यों में निम्नलिखित शामिल हैं:

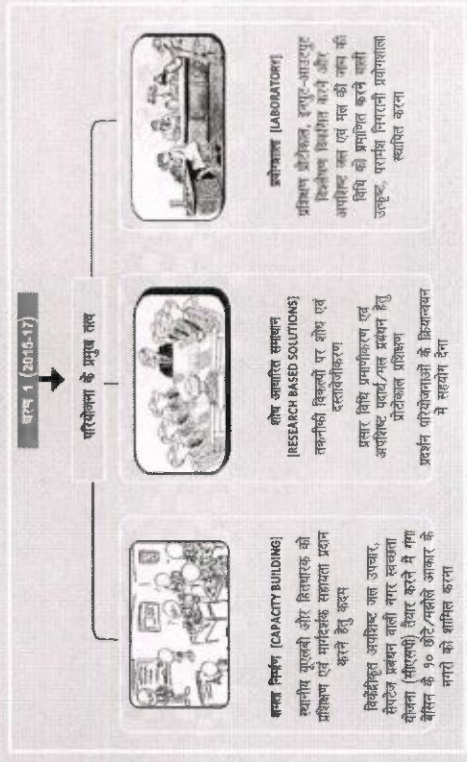
- सार्वजनिक अधिकारियों और संस्थानों का क्षमता निर्माण: गंगा बेसिन में बसे 10 छोटे/मझोले आकार के शहरों के शहरी स्थानीय निकायों (यूएलबी) तथा अन्य प्रमुख हितधारकों को विकेंद्रीकृत अपशिष्ट जल उपचार एवं मल प्रबंधन वाली नगर स्वच्छता योजना (सीएसपी) तैयार करने में प्रशिक्षण एवं मार्गदर्शक सहजता।



- तकनीकी विकासों पर शोध-आधारित समाधान और प्रदर्शन परियोजनाएं: विकेंद्रीकृत अपशिष्ट जल एवं सेटेल प्रबंधन तकनीकों, विधि प्रमाणिकरण और परिष्करण प्रोटोकॉल पर शोध एवं दस्तावेजीकरण, और शिक्षण उपकरणों के रूप में प्रदर्शन परियोजनाओं के क्रियान्वयन में सहायता देना।

- स्वतंत्र प्रयोगशाला की स्थापना: मौजूदा प्रयोगशालाओं को उन्नत बनाया जायेगा, ताकि संसाधन-संपन्न एवं परामर्श, पर्यवर्णीय निगरानी प्रयोगशाला स्थापित की जा सके, जहां पानी एवं अपशिष्ट पदार्थों के जैविक एवं रसायनिक दूषणकारी तत्वों की जांच की जा सके। यह प्रयोगशाला गंगा बेसिन के लक्षित स्थानों के प्रमुख प्रदूषण मानदंडों पर नियमित रूप से निगरानी रखेगी। यह बड़े धैर्य पर हितधारकों - शहरी स्थानीय निकायों (यूएलबी), जल निगम, पीएलईडी इंजीनियरों, चुनिंदा नियामक अधिकारियों एवं नगर विकास प्राधिकरणों व अन्य की क्षमताओं के निर्माण में सहजता प्रदान करेगी। चरण 9 के तीन प्रमुख कारक निम्नलिखित हैं:

चरण 1 में परियोजना के तहम हस्तक्षेप की नींव रखी जायेगी, जिसमें आवश्यक उपकरणों का विकास एवं गुणवत्ता जांच व उद्योगी शोध किये जाएंगे, और बिना नाली वाले इलाकों सहित पूरे शहर की सफाई की योजना और प्रभावी अपशिष्ट जल उपचार एवं एफएसएस के लिए प्रदर्शन परियोजनाओं की पहचान हेतु नगर स्तर पर शहरी स्थानीय निकायों और नगर के हितधारकों के साथ मिलकर कार्य करना आरम्भ किया जाएगा।





इसके अलावा, पर्यावरण निगरानी प्रयोगशाला शहरी स्थानीय निकायों (यूएलबी), जल निगम, जल एवं अपशिष्ट पदार्थ साधनों, पीएचईडी, संबंधित विनियामक अभिकरणों को लक्षित प्रशिक्षण प्रदान करेगी और इस क्षेत्र में कार्य करने वाली अन्य प्रयोगशालाओं के तकनीकी कर्मचारियों की क्षमता का भी निर्माण करेगी, ताकि वे अपशिष्ट जल एवं मल के परिणामों की व्याख्या कर सकें। इससे भारत में स्थायी, विकेंद्रीकृत एवं किफायती अपशिष्ट जल प्रबंधन, शहर-व्यापी स्वच्छता और अपशिष्ट पदार्थ/सेप्टेज प्रबंधन पर शोध, नवप्रवर्तन एवं अभ्यास हेतु नोडल केंद्र स्थापित करने में मदद मिलेगी।

यह परियोजना निम्नलिखित कार्यों पर केंद्रित होगी:

- स्वच्छ भारत अभियान के अंतर्गत राज्य कार्यक्रम प्रबंधन इकाइयों, राष्ट्रीय स्वच्छ गंगा अभियान के तहत निर्मित क्रायाकल्प और शहरी परिवर्तन पर अटल मिशन और राज्य स्तरीय कार्यक्रम प्रबंधन समूहों (एसपीएमजी) के साथ कार्य करने से राज्य स्वच्छता रणनीति एवं नगर स्वच्छता योजना को समन्वित करने में मदद मिलेगी।
- साथ ही, इसमें गंगा नदी बेसिन में बसे 50,000 - 100,000 की आबादी वाले ऐसे द्वितीयक नगरों (छोटे और मझोले) व शहरों का क्षमता निर्माण भी शामिल है, जो मुख्य रूप से ऑन-साइट स्वच्छता पर निर्भर हैं, अन्यथा वे अमृत मिशन से बाहर रह जायेंगे।
- यह प्रोग्राम बिल ऐंड मेलिंडा गेट्स फाउंडेशन (बीएमजीएफ) भागीदारों सहित दूसरों द्वारा विकसित उपकरणों का उपयोग करने का तरीका बतायेगा, ताकि यूएलबी अधिकारियों के क्षमता निर्माण में सहायता की जा सके और सीएसपी तैयारी की प्रक्रिया को मजबूत बनाया जा सके।
- यही नहीं, सेंटर फॉर साइंस एंड एनवायरमेंट (सीएसई), निमली (अलवर, राजस्थान) के स्कूल ऑफ वाटर ऐंड वेस्ट में स्थापित की जाने वाली अपनी तरह की पहली अपशिष्ट पदार्थ परामर्श प्रयोगशाला शहरी स्थानीय निकायों, जल निगम, पानी और अपशिष्ट उपयोगिताओं, पीएचईडी, संबंधित विनियामक अभिकरणों एवं नगर विकास प्राधिकरणों को लक्षित प्रशिक्षण प्रदान करेगी और इस क्षेत्र में कार्य करने वाली अन्य प्रयोगशालाओं के तकनीकी कर्मचारियों की क्षमता का भी निर्माण करेगी, ताकि वे अपशिष्ट जल एवं मल के परिणामों की व्याख्या कर सकें।

यह पहल 'BILL AND MELINDA GATES FOUNDATION' द्वारा समर्थित है

अधिक जानकारी हेतु संपर्क करें:

सुरेश कुमार रोहिल्ला, कार्यक्रम निदेशक

ईमेल: srohilla@cseindia.org



सेंटर फॉर साइंस एंड एनवायरमेंट (सीएसई)

41, तुगलकाबाद, इंस्टीट्यूशनल एरिया, नई दिल्ली 110062,

दूरभाष: 91 11 40616000, फैक्स: 29955879

वेबसाइट: www.cseindia.org



Centre for Science and Environment

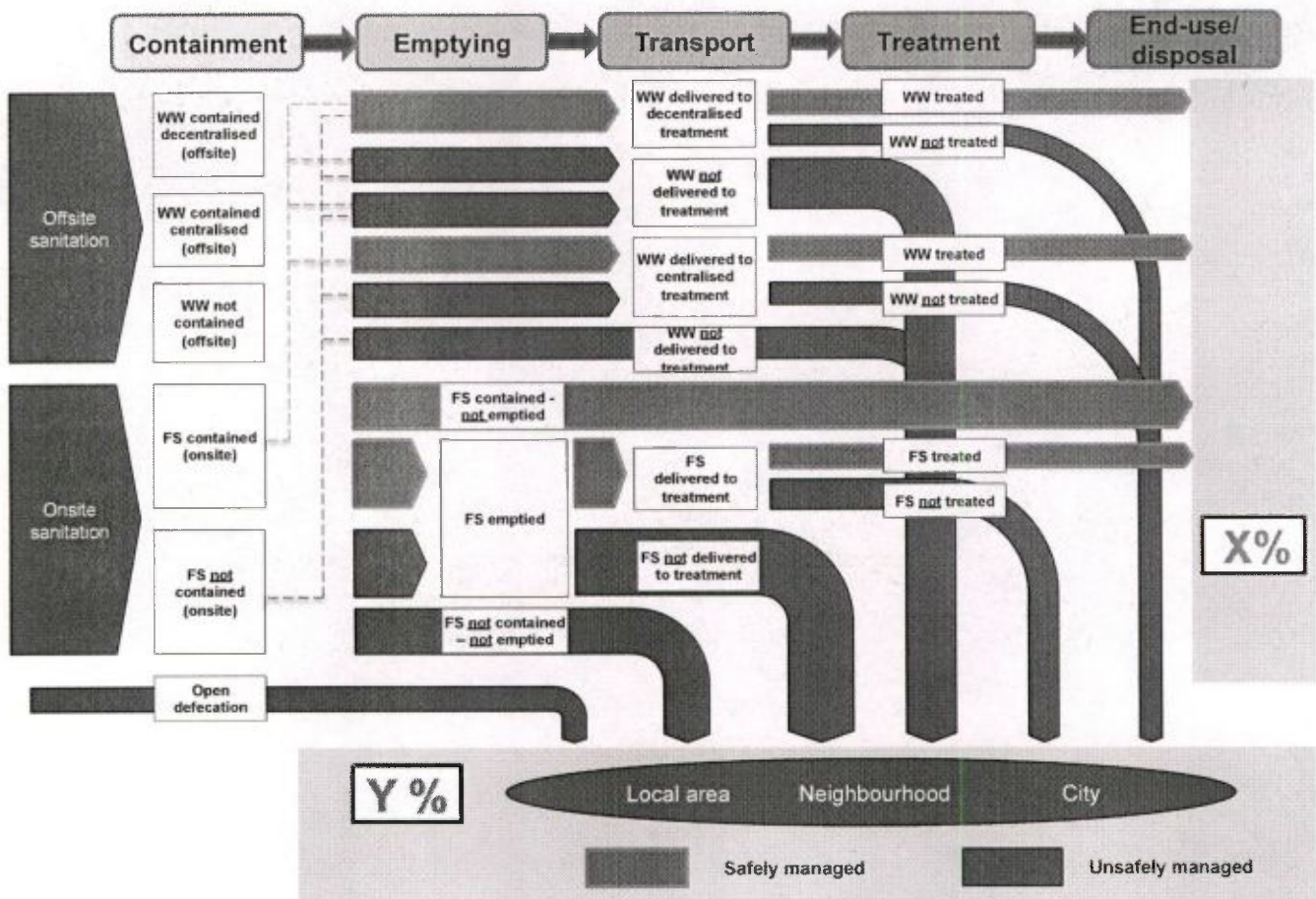
## Promoting excreta (sewage and septage) flow analysis to inform urban sanitation programming at a city-wide scale



SFD- Shit Flow Diagram

City name and date of production  
Desk based / field based

### SFD- Shit Flow Diagram



### What is an SFD?

An excreta flow diagram (also often described as shit flow diagram, SFD) is a tool to readily understand and communicate visualizing how excreta physically flow through a city or town. It shows how excreta are or is not contained as it moves from defecation to disposal or end-use, and the fate of all excreta generated. An accompanying report describes the service delivery context of the city or town.

#### It is

- A tool for engineers, planners and decision-makers
- Based on contributing populations and an indication of where their excreta (septage or sewage) goes
- A representation of public health hazard
- An effective communications and advocacy tool
- An overview from which to develop sanitation priorities

#### It is NOT

- Based on actual volumes/mass – these are determined by other related factors
- A representation of public health risk (risk = hazard x behavior)
- A precise scientific analytical tool



## **Purpose of an SFD**

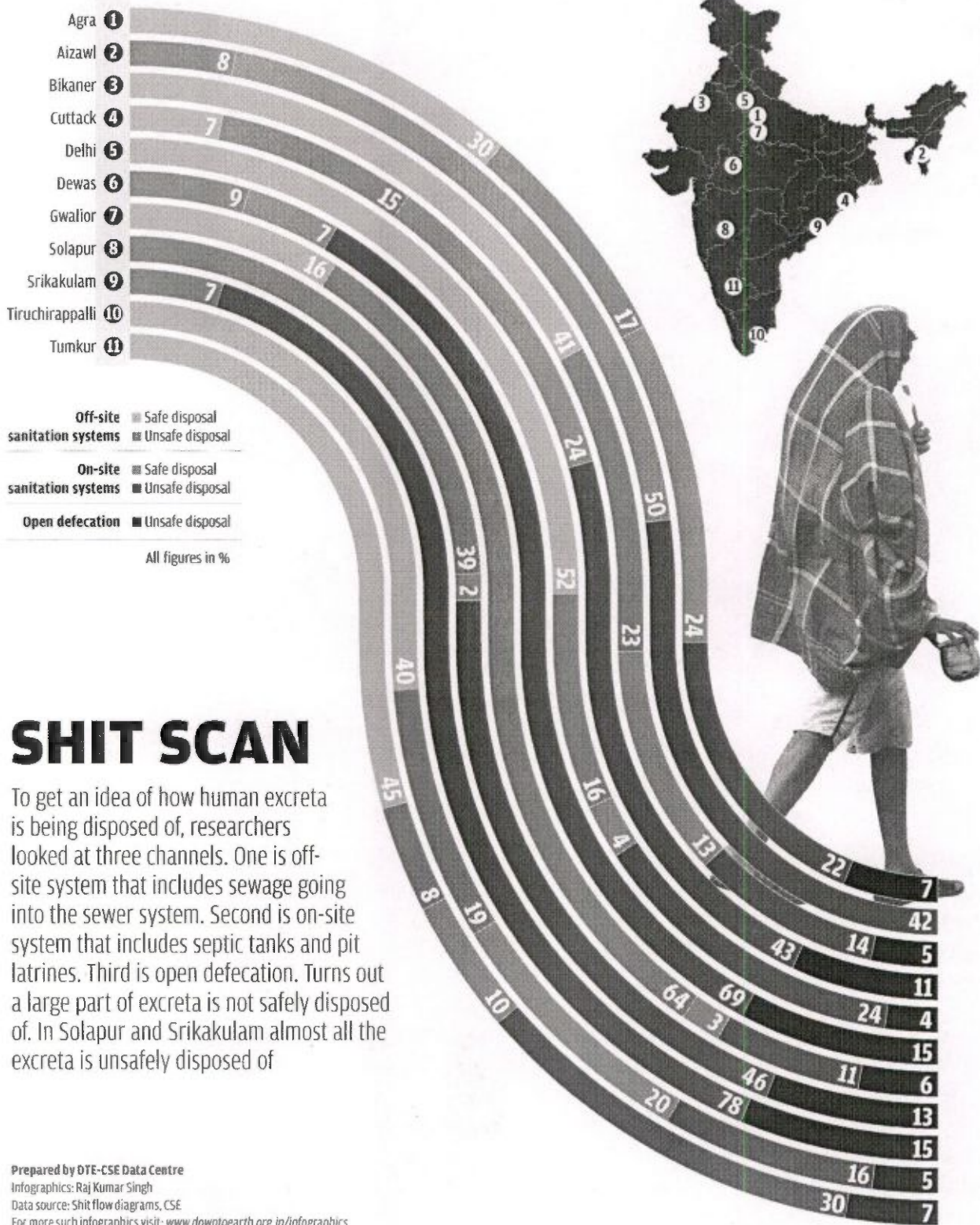
SFDs are a useful tool to inform urban sanitation programming. They offer an innovative way to engage city stakeholders like political leaders, sanitation experts and civil society organizations in a coordinated dialogue about excreta management. They can also be used for advocacy.

## **The SFD Promotion Initiative**

The main objective of the SFD Promotion Initiative is to continue further development of the SFD approach. This approach includes standardized guidance – a methodology and tools - for the easy production of standardized SFDs, backed by a description of information sources and the enabling environment in the city concerned.

The initiative aimed to test the approach in 50 cities in Africa, Asia and Latin America and, for the benefit of sanitation practitioners, decision-makers and civil society across the globe, the result is disseminated via the SFD web portal hosted by the Sustainable Sanitation Alliance (SuSanA) platform ([www.sfd.susana.org](http://www.sfd.susana.org)). The initiative is being managed by The Global Sector Program on Sustainable Sanitation of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ GmbH) under the umbrella of the Sustainable Sanitation Alliance (SuSanA). Since November 2014, GIZ has been supported by the Bill & Melinda Gates Foundation.

# How Indian cities perform in Excreta (septage and sewage) Management?



## SHIT SCAN

To get an idea of how human excreta is being disposed of, researchers looked at three channels. One is off-site system that includes sewage going into the sewer system. Second is on-site system that includes septic tanks and pit latrines. Third is open defecation. Turns out a large part of excreta is not safely disposed of. In Solapur and Srikakulam almost all the excreta is unsafely disposed of

Prepared by DTE-CSE Data Centre  
 Infographics: Raj Kumar Singh  
 Data source: Shit flow diagrams, CSE  
 For more such infographics visit: [www.downtoearth.org.in/infographics](http://www.downtoearth.org.in/infographics)



## About CSE & Background of Research

Centre for Science and Environment (CSE) is New Delhi based independent public research organization that aims to analyze and study the relationship between environment and development and create public consciousness about the need for sustainable development. The centre was set up in 1980 and is globally acknowledged for its intellectual leadership, policy advocacy and capacity building.

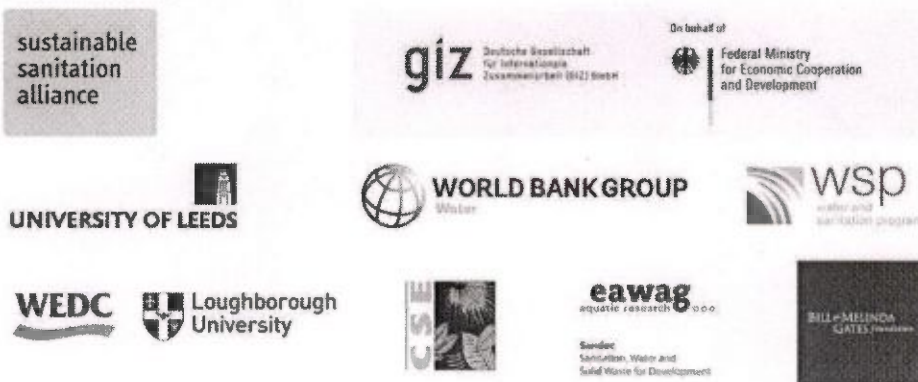
In 2012 CSE has published 7<sup>th</sup> report - India's first and most comprehensive survey of water and sewage management in a two volume set publication title – 'Excreta Matters'. The publication is based on data and information collected from over 71 cities in different agro-climatic zones on all aspects of water management (sourcing, treatment (water and waste), supply, pricing and equity etc). The book outlines an approach towards sustainable water and sewage management in Indian cities.

In 2012-2013 the Water and Sanitation Program (WSP) of the World Bank carried out an analysis of excreta management in 12 cities and developed new tools for assessing the context and outcomes relating to the flow of excreta through the city.

Building on this work, in 2014 the centre partnered with a group of institutions active in the field of excreta management to promote excreta flow analysis (septage and sewage) to inform urban sanitation programming through the service delivery assessment tool - Shit Flow Diagrams (SFDs), developed by Water and Sanitation Programme - World Bank. CSE has prepared SFDs for 11 cities in India as part of the above initiative.

## SFD Promotion Initiative - Consortium Partners

SFD Promotion Initiative



### Contact for further information

Dr Suresh Kumar Rohilla, Programme Director–Water Management (srohilla@cseindia.org)  
 Bhitush Luthra, Senior Research Associate (bhitush@cseindia.org)  
 Centre for Science and Environment, 41-Tuglakabad Institutional Area, New Delhi-110062  
 Tel. 91- 11 -40616000 Fax. 91-11-29955879 Website: www.cseindia.org



KIND ATTN: MR. M.N. PRADHAN, IAS

TA  
Supt

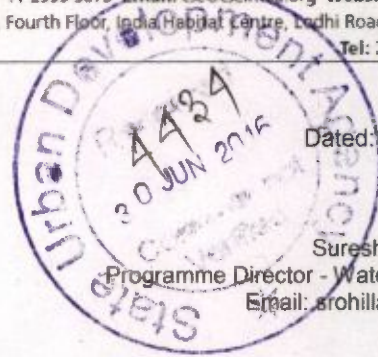
# CENTRE FOR SCIENCE AND ENVIRONMENT

MAIN OFFICE: 41, Tughlakabad Institutional Area, New Delhi-110 062 INDIA  
Tel: 2995 5124, 2995 6110, 2995 6394, 2995 6399 Fax: 91-11-2995 5879 Email: [cse@cseindia.org](mailto:cse@cseindia.org) Website: [www.cseindia.org](http://www.cseindia.org)

BRANCH OFFICE: Core 6A, Fourth Floor, India Habitat Centre, Lodhi Road, New Delhi-110 003  
Tel: 2464 5334, 2464 5335



Ref.No: CSE\_GangaBasinProject\_2016\_11



Dated: June 15, 2016

Suresh Kumar Rohilla  
Programme Director - Water Management  
Email: [srohilla@cseindia.org](mailto:srohilla@cseindia.org)

LEAVES  
OF  
IMPORTANT  
SURVIVAL  
TREES  
IN  
INDIA —  
MAHUA,  
KHEER,  
ALDER,  
PALMYRA  
AND  
OAK

Email/ Fax

**Subject: Sensitization Workshop cum Regional Conclave – Regarding Handholding Support for Preparation of City Sanitation Plans and Effective Septage and Faecal Sludge Management’ on dated: 18-19 July, 2016 at Delhi.**

Dear Sir/Madam,

This is in continuation to D.O ref letter no. MD-SBM/AA/62/2016 from JS & MD SBM MoUD dt. 30<sup>th</sup> May 2016, 7<sup>th</sup> June 2016 and D.O letter no. Sectt.01/2014-15/519/NMCG JS & MD NMCG dated: 10/06/2016 on above subject.

Centre for Science and Environment (CSE), New Delhi in partnership and support of Swachh Bharat Mission (SBM), Ministry of Urban Development and National Mission Clean Ganga (NMCG), Ministry of Water Resources for River Development and Ganga Rejuvenation, Government of India are organising a two day workshop cum regional conclave of state mission Directors of SBM /AMRUT, SPMG – NMCG, Mayors and Commissioners of the target flagship cities/towns.

The capacity building initiative is aimed at capacitating urban local bodies and other stakeholders and to help achieve convergence of NMCG – Namami Gange AMRUT, SBM – ODF cities programme in identified flagship town /cities by planning for city wide sanitation including non-sewered areas and identification of interventions for effective wastewater /septage management.

The workshop will be held at 18-19 July at Magnolia Hall, India Habitat Centre, Lodhi Road, New Delhi. You are requested to nominate the State Mission Director – AMRUT, SBM, SPMG – NMCG as well as Mayor and Commissioner from target town/cities identified by ministry in your state – **refer attached list of town/cities.**

The workshop organisers will reimburse economy class airfare / 2 A.C train fare on production of valid receipts (tickets and boarding cards), local travel and arrange accommodation for all the invited participants. Each town is expected to be represented by at least 1-2 senior functionaries on both the days and actively participate in the workshop.

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The Centre for Science and Environment is a non-governmental, non-profit organisation registered in New Delhi, set up to disseminate information about science and environment



May I request you to nominate the senior functionaries of state and target towns /cities. Please send confirmation of nomination and participation **latest by 5<sup>th</sup> July, 2016** addressed to workshop coordinator- Mr Ramesh Nair, Programme Manager – Water Management (email: ramesh@cseindia.org, Fax. 011 29955879, tel. 40616000 mobile: 88008 70288), CSE – 41 Tuglakabad Institutional Area, New Delhi 110062 with a copy to undersigned and intimation to Mission Director, SBM – MoUD as well as NMCG – MoWRD&GR.

If you require any clarification please do not hesitate to contact undersigned.

Yours sincerely,

(Suresh Kumar Rohilla)

To

**Mr Basudeb Banerjee, IAS**  
Chief Secretary  
Government of West Bengal  
"NABANNA" HRBC Building, 325, Sarat Chatterjee Road  
Howrah – 711 102  
West Bengal

Copy to –

Principal Secretary UD/MA  
✓ Mission Director (SBM) of target states  
Mission Director (AMRUT) of target states  
Head, SPMG – NMCG of target states  
Mayors & Commissioners of target town/cities  
Mission Director SBM – MoUD  
Mission Director NMCG – MoWR, RD&GR

Copy to:

**Dr Rajat Bhargava, IAS**

Joint Secretary & Mission Director  
National Mission on Clean Ganga  
Ministry of Water Resources, River Development & Ganga Rejuvenation  
Rear Wing, MDSS, 9-C.G.O. Complex  
Lodhi Road, New Delhi- 110 003

**Mr Praveen Prakash, IAS**

Joint Secretary & Mission Director SBM  
Ministry of Urban Development  
140-C, Nirman Bhawan  
New Delhi- 110 011

**Mr Debashis Sen, IAS**

Principal Secretary  
Urban Development Department  
Nagarayan, DF-8, Sector - 1  
Kolkata- 700 064  
West Bengal

**Mr M.N. Pradhan, IAS**

✓ Director- Swachh Bharat Mission (U)  
Director State Urban Development Agency (SUDA)  
Directorate of Local Bodies, Purta Bhawan, Salt Lake  
Kolkata - 700 091  
West Bengal

**Mr Mitra Chatterjee, IAS**

Mission Director- AMRUT  
Department of Municipal Affairs, Writers' Buildings  
Kolkata 700 001  
West Bengal

**Mr Sutanu Prasad Kar, IAS**

Programme Director  
SPMG (West Bengal) State NGRBA Programme  
Management Group (SPMG)  
Urban Development Department  
Government of West Bengal  
'NAGARAYAN', 6th Floor, DF-8  
Sector- i, Salt Lake City  
Kolkata- 700 064  
West Bengal

**Mr Sankar Addhya**

Chairperson  
Bongaon Municipality  
School Road  
Bongaon, 24 Pargan North - 743 235  
West Bengal

**Mr Arijita Sil (Sarkar)**  
Chairperson  
Bansberia Municipality  
Rudra Main Road , PO - Bansberia  
Hooghly - 712 502.  
West Bengal

**Mr Amar Singh Rai**  
Chairman  
Darjeeling Municipality  
Laden-la Road  
Darjeeling - 734101  
West Bengal

**List of Ganga basin towns/cities from the Uttarakhand, Uttar Pradesh, Bihar and West Bengal states-**

Sr.No.	City	District	State
1	Rishikesh	Dehradun	Uttarakhand
2	Chunar	Mirzapur	Uttar Pradesh
3	Ramnagar	Varanasi	Uttar Pradesh
4	Ganga ghat	Unnao	Uttar Pradesh
5	Bijnor	Bijnor	Uttar Pradesh
6	Muzaffarpur	Muzaffarpur	Bihar
7	Katihar	Katihar	Bihar
8	Buxar	Buxar	Bihar
9	Bodh Gaya	Gaya	Bihar
10	Bansberia	Hugli	West Bengal
11	Bongaon	North 24 Pargana	West Bengal
12	Darjiling	Darjiling	West Bengal

**List of other towns/cities**

Sr.No.	City	District	State
1	Agra	Agra	Uttar Pradesh
2	Aizawl	Aizawl	Mizoram
3	Bikaner	Bikaner	Rajasthan
4	Cuttack	Cuttack	Odisha
5	Delhi	Delhi	Delhi
6	Dewas	Dewas	Madhya Pradesh
7	Gwalior	Gwalior	Madhya Pradesh
8	Solapur	Solapur	Maharashtra
9	Srikakulam	Srikakulam	Andhra Pradesh
10	Tiruchirappalli	Tiruchirappalli	Tamil Nadu
11	Tumkur	Tumkur	Karnataka